



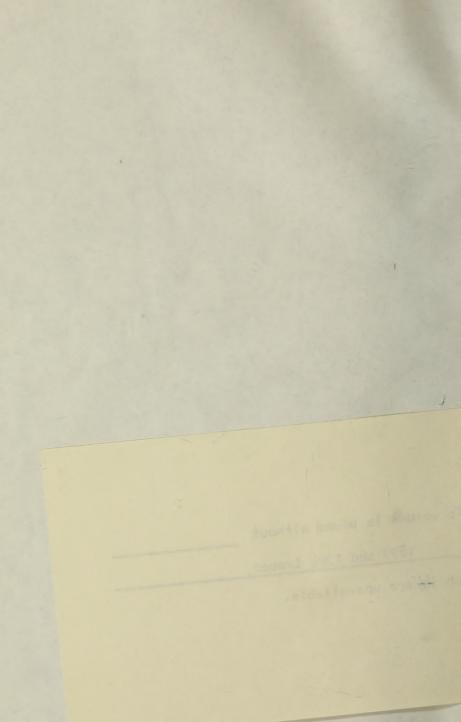
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# Radcliffe College

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## Madcliffe College

CAMBRIDGE, MASSACHUSETTS.

Circular 1898 \*\* The legal title of the Corporation (to be used in making gifts and bequests) is "RADCLIFFE COLLEGE." It should be described as established in Cambridge, Massachusetts.

Correspondence should be addressed to RADCLIFFE COLLEGE, Cambridge, Massachusetts.

FAY HOUSE, No. 10 Garden Street, is open to visitors interested in the work of the College, during both vacations and term-time; though students only are admitted to the class-rooms during the hours of lectures.

The Reference Library is in Fay House.

The Botanical Laboratory is in Fay House.

The Laboratories of Chemistry and Physics are separate buildings on the grounds.

The Laboratory of Biology occupies quarters in the Museum of Comparative Zoölogy on Oxford Street, by permission of the Curator.

A temporary Gymnasium, open to all students without charge, is at No. 20 Mason Street.

The Dean and the Secretary may be consulted at Fay House during term-time, and special appointments may be made as required.

The Academic year begins on the Thursday following the last Wednesday in September. In 1898 it is September 29. Students report for registration at 9 A.M. of that day.

The summer vacation begins on the last Tuesday in June, and ends the last Wednesday in September.

The Christmas recess is from Dec. 23, 1898, to Jan. 2, 1899, inclusive.

The Spring recess is from April 16 to April 22, 1899, inclusive.

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## Radcliffe College.

RADCLIFFE COLLEGE, the successor of the Society for the Collegiate Instruction of Women, offers systematic collegiate instruction to women under the professors and other teachers of Harvard University. More than ninety instructors of the University are teachers in Radcliffe College.

Fay House contains the recitation rooms and offices, and a select working library. The College has four laboratories, of Physics, Chemistry, Botany, and Biology. The collections of the Museum of Comparative Zoölogy, the Peabody Museum of American Archaeology, the University Museums of Geology, Botany, and Mineralogy, and the Semitic Museum, are also open to the students; and, by vote of the President and Fellows of Harvard College, the students have the use of the University Library, containing 400,000 volumes. Opportunities for study in the Astronomical Observatory, the Botanic Garden, and the Herbarium are also afforded.

The requirements for admission are identical with those for admission to Harvard College. The courses of instruction given in Radcliffe College correspond to both "undergraduate" and "graduate" courses offered by Harvard University, and are more than sufficient to enable a woman to perform the work required by the University for the degrees of A. B. and A. M. In addition to these, Graduate Students in Radcliffe College have access to a large number of Graduate courses in Harvard University. The examinations are the same in both institutions, and the diplomas conferring the degrees of A. B. and A. M. are countersigned by the President of Harvard University as a guarantee that these degrees are equivalent to the corresponding degrees given by the University.

For provisions for the admission of Graduate Students and Special Students, see pages 17 and 18.

### Associates of Radcliffe College.

ELIZABETH CARY AGASSIZ. ANNIE LELAND BARBER, A. M. WILLIAM ELWOOD BYERLY, PH. D. MARY COES, A. M. MARY HUNTINGTON COOKE. ARTHUR GILMAN, A. M. STELLA SCOTT GILMAN. GEORGE LINCOLN GOODALE, M.D., LL.D. WILLIAM WATSON GOODWIN, Ph. D., LL. D., D.C.L. JOHN CHIPMAN GRAY, LL. D. JAMES BRADSTREET GREENOUGH, A. B. HENRY LEE HIGGINSON, A. M. LILIAN HORSFORD. AGNES IRWIN. ALICE MARY LONGFELLOW. GRACE HARRIET MACURDY, A. B. ELLEN FRANCIS MASON. CHARLES ELIOT NORTON, LITT. D., LL. D. JAMES MILLS PEIRCE, A.M. CLEMENT LAWRENCE SMITH, A. M., LL. D. JOSEPH BANGS WARNER, A.M., LL. B. SARAH WYMAN WHITMAN.

President.

ELIZABETH C. AGASSIZ.

Dean.

AGNES IRWIN.

Treusurer.

HENRY LEE HIGGINSON.

ELIZABETH C. AGASSIZ, Chairman.

WILLIAM E. BYERLY.

WILLIAM W. GOODWIN.

SARAH W. WHITMAN.

CLEMENT L. SMITH.

LILIAN HORSFORD.

JOHN CHIPMAN GRAY.

JOSEPH B. WARNER.

ALICE M. LONGFELLOW.

Academic Board.

WILLIAM E. BYERLY, Chairman.

ELIZABETH C. AGASSIZ.

AGNES IRWIN.

JAMES BRADSTREET GREENOUGH. BENJAMIN OSGOOD PEIRCE.

EDWARD LAURENS MARK. JOHN HENRY WRIGHT.

SILAS MARCUS MACVANE.

HANS CARL GÜNTHER VON JAGEMANN.

WILLIAM JAMES ASHLEY.

GEORGE LYMAN KITTREDGE.

Secretary.

MARY COES.

Nibrarian.

CAROLINE A. FARLEY.

Medical Adriser to the College. HENRY PICKERING WALCOTT, A.B., M.D.

### Standing Committees.

The House Committee in charge of buildings, house-service, grounds, and repairs and additions, Mrs. Whitman, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Miss Longfellow, Mr. Warner, Miss Horsford.

The Students' Committee in charge of the general discipline of the students, oversight of their homes while in Cambridge, and of their amusements, clubs, and social life, MISS LONGFELLOW, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Miss Horsford, Mrs. Cooke, Miss Coes.

The Library Committee with general supervision of the Library, Miss Horsford, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Professor Goodwin, Miss Mason, Professor Greenough.

The Finance Committee in charge of all matters pertaining to expenditure, Endowment Fund, etc., Professor Byerly, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Mr. Gilman, Mr. Warner.

The Committee on the Gymnasium, Mrs. Agassiz (ex-officio), Miss Irwin, Miss Horsford, Miss Longfellow, and Mr. Warner.

The College keeps a list of those students who have received degrees or certificates and wish to find positions as teachers, for the information of school officers and others who may require their services.

## REQUIREMENTS FOR ADMISSION TO RADCLIFFE COLLEGE.

## ADMISSION OF CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS.

The requirements for admission to Radcliffe College are the same as those for admission to Harvard College. Radcliffe College holds no independent entrance examinations, but is authorized to make arrangements by which women can take the Harvard Examinations and have their work submitted to the Harvard Examiners. These examinations may be taken in Cambridge, and in other places in which the Harvard examinations are held in June. The September examinations are held in Cambridge only.

Two examinations of candidates for admission will be held in Cambridge in 1898, in Fay House. The days and hours are given in detail on the third page of the cover of this pamphlet.

The academic year begins on Thursday, September 29, 1898. All students register at the Office on that day at nine A. M.

Candidates are required to give at least a week's notice of their intention to present themselves at either examination. A blank will be sent to each applicant, to be filled out and promptly returned to Radcliffe College. Notice of a desire to be examined at any place other than Cambridge must be given not later than June 10.

A fee of five dollars is to be paid by each candidate each time that she presents herself. For this a receipt will be given and the amount will be deducted from the first payment for tuition.

A candidate may satisfy the requirements for admission to the Freshman Class by passing examinations in—

- (a) All the elementary studies, and at least Two of the advanced studies.
- (b) All the elementary studies with the exception of either German or French, and at least THREE of the advanced studies.

- (c) All the elementary studies with the exception of either Greek or Latin, and at least FOUR advanced studies, including 6 and one of the three numbered 7, 8, and 9.
- (d) All the elementary studies with the exception of either Greek or Latin and either German or French, and at least FIVE advanced studies, including 6 and one of the three numbered 7, 8, and 9.

A candidate may be admitted in spite of deficiencies in some of the studies required; but such deficiencies must be made up during her course.

The examinations in the elementary studies will occupy one hour each with the exception of those in English, Greek, and Latin, which will occupy two hours each.

#### ELEMENTARY STUDIES.

I. English.— English may be offered either as a Preliminary or as a Final subject. The examination in English will occupy two hours.

The candidate will be required to write a paragraph or two on each of several topics chosen by her from a considerable number—perhaps ten or fifteen—set before her on the examination paper. In 1898 the topics will be drawn from the following works:—

Milton's Paradise Lost, Books I and II; Pope's Iliad, Books I, VI, and XXII; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Southey's Life of Nelson; Carlyle's Essay on Burns; Lowell's Vision of Sir Launfal; Hawthorne's House of the Seven Gables.

The candidate is expected to read intelligently all the books prescribed. She should read them as she reads other books; she is expected, not to know them minutely, but to have freshly in mind their most important parts. In every case the examiner will regard knowledge of the book as less important than ability to write English.

As additional evidence of preparation, the candidate may present an exercise book, properly certified by her instructor, containing compositions or other written work.

The works prescribed for this part of the examination in 1899, 1900, and 1901 are as follows:—

In 1899: Dryden's Palamon and Arcite; Pope's Iliad, Books I, VI, XXII, and XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; De Quincey's Flight of a Tartar Tribe; Cooper's Last of the Mohicans; Lowell's Vision of Sir Launfal; Hawthorne's House of the Seven Gables.

In 1900: Dryden's Palamon and Arcite; Pope's Iliad, Books I, VI, XXII, and XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Scott's Ivanhoe; De Quincey's Flight of a Tartar Tribe; Cooper's Last of the Mohicans; Tennyson's Princess; Lowell's Vision of Sir Launfal.

In 1901: Shakspere's Merchant of Venice; Pope's Iliad, Books I, VI, XXII, XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Cooper's Last of the Mohicans; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

II. A certain number of books will be prescribed for careful study. This part of the examination will be upon subject-matter, literary form, and logical structure, and will also test the candidate's ability to express her knowledge with clearness and accuracy.

The books prescribed for this part of the examination are:

In 1898: Shakspere's Macbeth; Burke's Speech on Conciliation with America; De Quincey's Flight of a Tartar Tribe; Tennyson's Princess.

In 1899: Shakspere's Macbeth; Milton's Paradise Lost, Books I and II; Burke's Speech on Conciliation with America; Carlyle's Essay on Burns.

In 1900: Shakspere's Macbeth; Milton's Paradise Lost, Books I and II; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

In 1901: Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro, Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

No candidate will be accepted in English whose work is seriously defective in point of spelling, punctuation, grammar, or division into paragraphs.

In connection with the reading and study of the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry should be committed to memory. The essentials of English grammar should not be neglected in preparatory study.

The English written by a candidate in any of her examination-books may be regarded as part of her examination in English, in case the evidence afforded by the examination-book in English is insufficient.

- 2. Greek.—The translation at sight of simple Attic prose (with questions on the usual forms and ordinary constructions of the language).
- 3. Latin.—The translation at sight of simple prose (with questions as in Greek).

The passages set for translation must be rendered into simple and idiomatic English. Teachers are requested to insist on the use of good English as an essential part of the candidate's training in translation.

In Latin the following pronunciation is recommended:— $\bar{a}$  as in *father*,  $\check{a}$  the same sound but shorter;  $\bar{e}$  like  $\hat{e}$  in  $\hat{f}$   $\hat{e}$   $\hat{t}$   $\hat{e}$  as in set;  $\bar{i}$  as in machine,  $\check{i}$  as in sit;  $\bar{o}$  as in hole,  $\check{o}$  as in nor;  $\bar{u}$  as in rude,  $\check{u}$  as in put; j like y in year, c and g like Greek  $\kappa$  and  $\gamma$ .

Instructors are requested to teach their pupils in pronouncing Greek to use the *Greek accents*, and to give (for example) a the sound of a in father,  $\eta$  that of a in fate,  $\iota$  that of i in machine, etc.

It is further recommended that pupils be accustomed, from the beginning of the preparatory course in Greek and Latin, to translate into those languages, both orally and in writing, passages prepared by the teacher on the basis of the prose authors read.

- 4. German.—The translation at sight of simple prose.
- 5. French.—The translation at sight of ordinary prose.

The passages set for translation in 4 and 5 will be similar to those set at the final examinations in German A and French A respectively,—College courses, each having three hours of instruction a week through the year. The passages set for translation must be rendered into simple and idiomatic English. A knowledge of the language itself, rather than of the grammar, is expected; but proficiency in elementary grammar or facility in writing the language will be accepted as an offset to some deficiency in translation. It is recommended that from the outset attention be given to pronunciation. Wherever possible, care should be taken, during the whole course of preparation, to accustom the pupil to hear and understand spoken German and French.

6. History (including Historical Geography). — Either (1) History of Greece and Rome; or (2) History of the United States and of England.

The following works will serve to indicate the amount of knowledge demanded in History: Oman's History of Greece; Allen's History of the Roman people (the whole), or Leighton's History of Rome (to the death of Commodus); Higginson's Young Folks' History of the United States (to the end of Chapter XXI.), and Johnston's History of the United States for Schools (beginning at § 269); Guest and Underwood's Handbook of English History (to the year 1793), or Gardiner's Student's History of England through Part IX.

The following selections are recommended for additional reading and will be made the basis of optional questions in the examinations\*:—

\*Candidates who take the questions on the Selections will be allowed to omit some of the questions on the corresponding Manual.

For Greek History: Curtius's History of Greece, Book I. Ch. I., Book II. Ch. IV., and Book III. Ch. III.

For Roman History: Beesly's The Gracchi, Marius, and Sulla; Tighe's Development of the Roman Constitution.

For American History: Lodge's English Colonies, Chapters II. and XXII.; Morse's John Quincy Adams, Chapters II. and III.; Josiah Quincy's Figures of the Past.

For English History: Macaulay's History of England, Chapters I. and III.

- 7. Mathematics.—(a) Algebra, through Quadratic Equations. (The requirement in Algebra embraces the following subjects: factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem for positive integral exponents and the extraction of roots; putting questions into equations, and the reduction of equations; the ordinary methods of elimination, and the solution of both numerical and literal equations of the first and second degrees, with one or more unknown quantities, and of problems leading to such equations.) (b) Plane Geometry.
- 8. Physical Science. Either (1) Astronomy (Young's Lessons in Astronomy, Ginn & Co., omitting the appendix) and Physics (Avery's Elements of Natural Philosophy,\* or Gage's Elements of Physics); or (2) a course of experiments not less than forty in number performed at school by the pupil. These must be selected from a list issued by the University under the title A Descriptive List of Elementary Exercises in Physics, or must be approved by the Department of Physics as the equivalent of those contained in this list.

All teachers who can command the necessary apparatus are requested to present their pupils in (2) rather than in (1). (For the character of the examination in (2) see the note under Advanced Studies 8 and 9.)

#### ADVANCED STUDIES.

The half-courses designated by the letters (a) and (b) in the studies numbered 3, 6, and 7 may be combined at the option of the candidate; and any two of them will be accepted (subject to the conditions stated on page 8, paragraphs c and d) as the equivalent of one whole study.

\* The following portions of the 1885 edition may be omitted:—sections I. and II. of chap. I. (excepting arts. 23–30), arts. 254–267, 346–349, 371, 411–415, 445–455, 464–467, 470–476, 707–714, 729–745, and the whole Appendix,

- I. Greek.— The translation at sight of average passages from Homer or the translation at sight of less difficult passages from both Homer and Herodotus (with questions on the usual forms and ordinary constructions of the language and on prosody).
- 2. Latin.—The translation at sight of average passages from Cicero and Virgil (with questions as in Greek).\*
- 3. Greek and Latin Composition.—(a) The translation into Attic prose of a passage of connected narrative. (b) The translation into Latin of a similar passage.

In preparing for this subject, it is strongly urged that from an early stage pupils be accustomed to translate into Greek and Latin not merely detached sentences illustrative of constructions, but also passages of connected narrative prepared by the teacher on the basis of the prose authors read. The passages set at the examination will be of this character. Examples of the kind of exercise recommended may be found in the following books: The Beginner's Greek Composition, by Collar and Daniell (Boston: Ginn & Co.); Allinson's Greek Prose Composition (Boston: Allyn & Bacon); Woodruff's Exercises in Greek Prose Composition (Boston: Leach, Shewell, & Sanborn); Collar's Practical Latin Composition (Boston: Ginn & Co.); Daniell's Exercises in Latin Composition (Boston: Leach, Shewell, & Sanborn).

- 4. German.— Translation at sight of modern German prose.— Grammar.— Composition based upon the following books: Riehl (Der Fluch der Schönheit).— Freytag (Aus dem Staat Friedrichs des Grossen).— Heine (Die Harzreise).—Goethe (the first three books of Dichtung und Wahrheit).—Lessing (Minna von Barnhelm).— Schiller (Wilhelm Tell and Das Lied von der Glocke).— Thirty pages of lyrics and ballads.
- 5. French.—Translation at sight of standard French prose.—Grammar.—Composition based upon the following books: Daudet (La Dernière Classe—Le Siège de Berlin).—Mérimée (Colomba).—Sandeau (Mlle. de la Seiglière, the play).—Corneille, Racine, Molière (one play by each author).

In advanced German and French, translation at sight will form an important part of the examination. Candidates will be expected to be

\*The most elementary courses in Latin given in Radeliffe College are open to those students only who have passed in Advanced Latin in the examination for admission.

familiar with the subject-matter as well as the language of the prescribed books. Some of the books may be changed from time to time, but with not less than two years' notice. The passages set for translation into German or French will be suited to the proficiency of those who have begun to study the language in College and have had instruction in it three hours a week for two years.

- 6. Mathematics.—(a) Logarithms; \* Plane Trigonometry, with it applications to Surveying and Navigation. (b) Solid Geometry.
- 7. Mathematics (a) The Elements of Analytic Geometry. (b) Advanced Algebra.

The following books will serve to indicate the nature and amount of the requirements in Logarithms and Trigonometry, Solid Geometry, Analytic Geometry and Advanced Algebra.

Logarithms and Trigonometry. Wheeler's Logarithms (Cambridge: Sever) or the unbracketed portions of Peirce's Elements of Logarithms (Boston: Ginn & Co.). Wheeler's Plane Trigonometry (same publishers). Problems in Plane Trigonometry (Cambridge: Sever). Peirce's Mathematical Tables, chiefly to four places (Boston: Ginn & Co.).\*

Solid Geometry. Chauvenet's Geometry, Revised and Abridged (Philadelphia: J. B. Lippincott & Co.), Books VI., VII., VIII., and IX.

Analytic Geometry. Briggs's Analytic Geometry (New York: Wiley & Co.).

Advanced Algebra. Wentworth's College Algebra (Boston: Ginn & Co.), to article 496, omitting in Chapter XV., § 207, Chapters XVII., XIX., XX., in Chapter XXII., §§ 310-314, in Chapter XXII., §§ 321-331, Chapters XXV., XXVI., XXVII., in Chapter XXIX., §§ 452-463, also § 476.

- 8. Physical Science.—Physics. A course of at least sixty experiments in addition to those of Elementary Physics (2), selected from the same or similar manuals, and covering the same subjects, but demanding more skill and more knowledge of physical theories and laws.
- 9. Physical Science. Chemistry. A course of at least sixty experiments in General Chemistry actually performed at school by the pupil.

In Elementary Physics (2), in Advanced Physics, and in Chemistry, the candidate will be required to pass both a written and a laboratory

\* Candidates are required to use at the examinations the four-place tables provided by the University.

examination. The written examination will test her knowledge of experiments and experimenting as well as her knowledge of principles and results. The laboratory examination will test her skill in experimenting. The candidate will be required to hand in the original note-book in which she recorded the steps and results of the experiments which she performed at school; and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. The note-book in Physics should contain an index of the exercises which it describes.

A candidate who offers Elementary or Advanced Physics or Chemistry will hand in her laboratory note-book at the hour of the written examination. Laboratory note-books will be deposited, after examination, in the Secretary's office, where they will be kept for a reasonable time, subject to the order of the owners.

A candidate examined in June at any place where a laboratory examination is not provided will be required to take such an examination in Cambridge in the autumn; but if she passes the written examination in June and presents a satisfactory note-book, the subject will be counted in her favor in determining the question of her admission to College. Similarly a Preliminary candidate is allowed to postpone her laboratory examination, until September of the year in which she enters College.

Most pupils will need lectures or other oral explanations in addition to the descriptions given in the laboratory manuals. When it is impossible to provide lectures, two text-books treating the subject from different points of view will be advantageous.

Descriptive lists of experiments which will meet the requirements in Physics and Chemistry may be procured (at 40 cents each) of the Harvard Coöperative Society, or of Charles W. Sever, Bookseller, Harvard Square, Cambridge.

#### EXAMINATION PAPERS.

A set of recent examination papers will be sent free to any address, on application to the Secretary.

#### DIVISION OF THE EXAMINATION.

A candidate for admission may pass the entire examination at one time; or she may divide it between two years, or between June and September of the same year. In the former case she is known as a "Preliminary Candidate," in the latter as a "Postponer." A Preliminary Examination is always taken a year or more before the Final Examination. Postponing candidates, whether in September or June, are taking Final Examinations.

If a study consists of two parts, designated by the letters (a) and (b), the examinations in those parts may be taken separately by a candidate who divides her examinations for admission either between two years or between June and September of the same year. No other study may be divided.

#### PRELIMINARY EXAMINATION.

A candidate may pass a Preliminary Examination in some of the studies, and be examined in the remaining studies in some subsequent year. For the Preliminary Examination the candidate must present herself in June, having previously sent in a certificate of preparation.

A Preliminary certificate will be granted to any candidate who passes the examination in studies occupying five hours on the examination programme.

Candidates may offer themselves for the Preliminary Examination in any studies, elementary or advanced, in which their teachers certify that they are prepared, and in no others.

#### ANTICIPATION OF PRESCRIBED ENGLISH.

The examination of candidates who anticipate the English of the Freshman year is as follows:—

Composition: Hill's Principles of Rhetoric (edition of 1895); Practice in Writing.— Literature: Swift's Battle of the Books and Gulliver's Travels; Defoe's Robinson Crusoe (Part I); The Sir Roger de Coverley Papers in the Spectator; Pope's Rape of the Lock, Epistle to Arbuthnot, and Iliad I, VI, XXII; The lives of Swift, Defoe, and Pope in the English Men of Letters Series; Thackeray's English Humorists and Henry Esmond.

#### ADMISSION TO ADVANCED STANDING.

Students may be admitted to advanced standing either (I.) by examination, or (II.) from other colleges without complete examination.

- I. BY EXAMINATION. A candidate mean in the Sophomore, Junior, or Senior Class, if she appear on examination to be versed in the following studies:—
  - 1. The studies required for admission to the Freshman Class.
- 2. All the prescribed studies already pursued by the class for which she offers herself, and as many elective studies as she would have pursued if she had entered at the beginning of the course.

Examinations for advanced standing are held in such courses only as are intended primarily for undergraduates; and, among these, in such only as may reasonably be anticipated by examination. No laboratory course, no course in composition or discussion, and no other course in which an examination is obviously an inadequate test may be offered for admission to advanced standing.

A candidate may be admitted in spite of deficiencies in some of these studies; but no candidate so admitted will be recommended for the degree until she has made good such deficiencies to the satisfaction of the Academic Board.

Candidates for admission to advanced standing may divide the examination between June and September; but a candidate who fails in any subject in June will not be examined again in that subject in September.

The Secretary must receive, not later than September 10, a written notice specifying the elective course or courses in which the candidate wishes to be examined.

II. WITHOUT COMPLETE EXAMINATION. Graduates of other colleges, and students from the higher classes of other colleges, may be admitted without examination, and assigned to those classes for which their previous training seems to qualify them. Every case is decided on its own merits; but students from other colleges are not admitted *ad eundem* without examination.

Applications will be acted upon at any season of the year. Every person wishing to enter Radcliffe College under this provision must make a complete written statement of the work on which she bases her application. In this she should state how old she is; at what school or schools she received her preparatory training; how long she attended each school; what she studied; how much time she gave to each of the more important studies; and how far she advanced in each before she entered college.

Blank forms of application for admission to advanced standing may be obtained from the Secretary.

Much importance is attached to the quality of the work offered. The applicant is expected to furnish official statements showing her rank or grade in her various college studies; and letters, or other evidence, showing the opinion her instructors have formed of her character and scholarship.

Candidates from other colleges may be admitted to Radcliffe College in spite of some deficiencies in their work, on condition that they shall make good these deficiencies before receiving a degree. Deficiency in one direction may be offset by unusual attainments in another.

#### SPECIAL STUDENTS.

Applicants who pass a satisfactory examination on a smaller number of subjects than are called for in the full Requirements may be admitted, at the discretion of the Academic Board, to such special courses as they seem qualified to pursue.

Students of mature age, who wish to pursue chiefly higher courses of study, may be admitted, at the discretion of the Academic Board, without passing the examination for admission, provided that they satisfy the instructors in the courses which they elect of their fitness to pursue them.

All special students are expected to take four courses of study.

Special students may, on application, receive certificates at the end of their term of study, stating the courses in which they have passed satisfactory examinations, and giving the grade to which they have been assigned in each course.

Special students should make application before the first day of September.

#### STUDENTS AND EXAMINATIONS.

Undergraduates are expected to make their choice of elective studies before the first day of September, and no changes are allowed except by leave of the Academic Board. Applications for changes must be made in writing, with a statement of reasons.

The student's choice is limited to those studies which her previous training qualifies her to pursue; and she must observe any restrictions that may be attached to the particular courses she wishes to select. She is further required to avoid any conflict of recitation hours or of examinations between her courses.

No starred (\*) course may be chosen without the *previous* consent of the Instructor. Application should be made, if possible, before the summer vacation.

An undergraduate who wishes to take a Graduate course is required to consult the Instructor in advance; if possible, she should do this before the summer vacation. She will be admitted to the course on the recommendation of the Instructor, which must be given in writing.

Not more than one Course of Research may be taken in any year by an undergraduate.

All students are expected to attend the exercises and to pass all the examinations in the courses which they elect, unless excused by special vote of the Academic Board. Applications for excuses must be made to the Secretary in writing with the reasons.

#### LODGINGS FOR STUDENTS.

Students may learn of lodging-places approved by the Students' Committee by enquiring of the Dean. The ladies of the Standing Committees will be glad to assist students by their advice, whenever it is necessary.

All arrangements for boarding and lodging are to be subject to the approval of the Dean, and the Secretary must be kept constantly informed of the address of every student.

#### GRADUATE STUDENTS.

#### ADMISSION.

Bachelors of Arts of Radcliffe College, and Graduates of other Colleges of good standing who present satisfactory evidence of character and qualifications, are admitted without examination as Graduate Students in Radcliffe College.

An application for admission may be made by filling out and depositing a registration blank at the office. If the applicant is not a graduate of Radcliffe College, she must also file, for the consideration of the Academic Board, satisfactory certificates of scholarship and character; and if she holds a degree from any institution, she must present diplomas or official certificates, sufficient to furnish evidence of such degree or degrees.

Admission as a Graduate Student does not imply admission to candidacy for a Degree.

#### RESIDENCE.

Graduate Students are required to be in regular attendance on the exercises in some course or courses of instruction, and to do all the required work (including all examinations) in the courses which they elect; or to carry on regular work in some laboratory or museum or in the library, under the frequent inspection and criticism of some specified instructor or instructors.

#### STUDIES.

The instruction open to students in Radcliffe College is arranged in one list of Courses of Instruction, consisting of Full Courses and Half-Courses. These are distributed into *three groups* in the several branches of study. namely,

- (1) Courses designed primarily for Undergraduates.
- (2) Courses for Graduates and Undergraduates.

(3) Courses primarily for Graduates.

Any course (or half-course) in the list is open to all Graduate Students who present sufficient evidence of qualification for that course. It is sometimes advisable, and is not unusual, for a Graduate student to choose some of her studies from the First, or Undergraduate, Group; but such studies are not ordinarily counted for the degree of A. M. Many of the studies of the Second Group are distinctly of Graduate grade, in the sense of being in advance of such as are ordinarily pursued for a Bachelor's degree. They are thorough and comprehensive courses, characterized by advanced methods of instruction and study; and are in fact largely chosen by Graduate Students, and found to be suitable to their needs. To some of these courses, undergraduates are admitted only by special leave of the instructor. To the courses of the Third Group, undergraduates are admitted only on the recommendation of the instructor.

Among the higher courses of instruction — of the Second and Third Groups — in nearly every department of study, are Courses of Research and Seminaries, for students who wish to do special work of an advanced character. These courses are carried on under various plans of administration in the several departments, but always with the object of affording opportunity for regular independent study.

A complete year's work for a Graduate Student regularly consists of four full courses of instruction, of advanced grade, or of their equivalent in courses and half-courses, pursued with high credit throughout an academic year. All the work required in such courses must be done, and all the examinations must be passed; unless the student has leave from the Academic Board, with the approval of the Instructor, to omit some part of the ordinary requirement.

A student who wishes to devote her time, largely or wholly, to special study of an advanced character may count a course embracing such study as equivalent to more than one course, up to a complete year's work, or may carry on such study outside and in place of the regular courses, under the direction and supervision of some specified Instructor or Instructors. In either case, the substitution proposed must have the approval or consent of the Instructor or Instructors concerned; and the permission of the Academic Board is required.

#### DEGREES.

The requirements for the degrees of Bachelor of Arts and Master of Arts are the same as for the corresponding degrees in Harvard University.

The diplomas are countersigned by the President of Harvard University and bear the University seal.

#### TUITION FEES.

The annual tuition fee for a student doing full work is two hundred dollars, in addition to the special laboratory fees named below. It is payable, one hundred and twenty-five dollars on October 1, seventy-five dollars on February 1.

For those students who are permitted by the Academic Board to take less than four courses the charges are as follows:—

For any regular course not a laboratory course or course of research, sixty dollars; for any half-course, not a laboratory course, thirty dollars; for a course of research or for a laboratory course, besides the special laboratory fees, a sum equal to the fee for one, two, or more courses, according to the number of courses to which the Academic Board shall consider it equivalent as part of the student's work for the year. But the minimum fee charged for any student is forty dollars, and the maximum fee, in addition to the special laboratory fees, is two hundred dollars, covering any number of courses.

Two-thirds of the fee is payable on the first day of October, the remaining third on the first day of February.

Students in laboratory courses pay in addition a special laboratory fee of five dollars for each course or half-course.

No student will be admitted for any shorter time than a whole academic year, except by special vote of the Academic Board.

#### SCHOLARSHIPS.

#### THE ELLEN M. BARR SCHOLARSHIPS.

By the terms of the will of the late Ellen M. Barr, the residue of her estate, after the payment of debts and legacies, was bequeathed to Radcliffe College. Subject to the payment of an annuity, the income of this bequest is to be applied "in the form of annual scholarships of not less than two hundred and fifty dollars and not more than three hundred dollars each, for the benefit of students in Radcliffe College, who, in point of character, ability and physical constitution, give promise of future usefulness, and who stand in need of pecuniary assistance."

In 1897-98 three scholarships from this fund were awarded to MARY THERESA LOUGHLIN, of the class of 1900; MARY RHOADES HUNT, of the class of 1900; MABEL VEAZIE ARNOLD, of the class of 1900.

#### THE ELLA LOWELL LYMAN MEMORIAL SCHOLARSHIP.

By gift of Mr. Arthur T. Lyman of Boston, an annual scholarship has been established in memory of his wife, Ella Lowell Lyman. The fund provides for the tuition fees of one student.

Applications for the year 1898-1899 should be in the hands of the Dean by the first day of June, 1898.

#### THE ELIZABETH CARY AGASSIZ SCHOLARSHIP.

The Elizabeth Cary Agassiz Scholarship is a gift to Radcliffe College from various friends of Mrs. Agassiz, who have wished that it should bear her name. The fund provides for the tuition fees of one student.

In 1897-98 this scholarship was awarded to Annie Leora Jackson and Cora Frances Roper, of the class of 1899.

Applications for the year 1898-1899 should be in the hands of the Dean by the first day of June, 1898.

#### THE AGNES IRWIN SCHOLARSHIP.

By gift of six hundred and eighty former pupils of the first Dean of Radcliffe College, the Agnes Irwin Scholarship has been established. By the terms of the gift the student to have the benefits of this scholarship is to be appointed by Miss Agnes Irwin, and all details regarding it are to be arranged by her for the present and the future. The fund provides for the tuition-fees of one student.

In 1897-98 this scholarship was awarded to KATE DANIELS GRISWOLD, of the class of 1898.

Applications for the year 1898-1899 should be in the hands of the Dean by the first day of June, 1898.

#### THE WIDOW JOANNA HOAR SCHOLARSHIP.

The College has established The Widow Joanna Hoar Scholarship with funds contributed by an unknown friend in memory of the widow of Charles Hoar, Sheriff of Gloucester in England, who came to America with her children in 1638. In awarding this scholarship preference is to be given to natives of Concord, Mass., or to daughters of citizens of that place. The fund at present provides for the tuition-fees of one student.

In 1897-98, this scholarship was awarded to Frances Mary Drury, of Concord, Mass., of the class of 1898.

Applications for the year 1898-1899 should be in the hands of the Dean by the first day of June, 1898.

#### THE MARIA DENNY FAY MEMORIAL SCHOLARSHIP.

An annual scholarship of two hundred dollars (\$200) has been established, which provides for the tuition-fees of one student.

In 1897-98 this scholarship was awarded to LILLIAN MAY WING, of the class of 1898.

Applications for the year 1898-1899 should be in the hands of the Dean by the first day of June, 1898.

#### THE JOSIAH M. FISKE MEMORIAL SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske, of New York City, an annual scholarship has been established in memory of her late husband, Josiah M. Fiske, who was once a resident of Cambridge. The fund provides for the tuition-fees of one student.

In 1897-98 this scholarship was awarded to Gertrude Mary Flani-Gan, of the class of 1898.

Applications for the year 1898-1899 should be in the hands of the Dean by the first day of June, 1898.

#### THE SARGENT PRIZE.

This prize was instituted by John Osborne Sargent of the class of 1830, and endowed in his memory by his daughter, Georgiana W. Sargent, in 1892. The prize is of one hundred dollars for the best metrical translation of a lyric poem of Horace.

Undergraduates of Harvard College and of Radcliffe College may compete for this prize. The prize may be withheld if no competitor appears to deserve it.

The versions must be neatly and legibly written upon letter paper, of good quality, of quarto size, with a margin of not less than one inch at the top and bottom and on each side; and the sheets must be securely stitched together. They must be deposited with the Dean of Radcliffe College on or before the first day of May, 1898. Each version must have inscribed upon its title-page an assumed name of the writer, and must be accompanied by a sealed envelope containing the writer's true name and superscribed with the assumed name.

In 1890 the Sargent Prize was awarded to Helen Leah Reed, of the Senior Class.

In 1892 the Sargent Prize was awarded to MARGARET FOSTER HERRICK, a Special Student.

#### THE GEORGE B. SOHIER PRIZE.

Mr. Waldo Higginson, of the Class of 1833 in Harvard College, gave to Harvard College a sum to found a Prize in memory of his brother-in-law George B. Sohier of the Class of 1852, which is to be known as the George B. Sohier Prize. The endowment is for "one prize of \$250 for the best thesis presented by a successful candidate for Honors in English or Modern Literature. If no thesis is deemed worthy of a prize, no prize will be given." The competitors may be either (1) undergraduates in Harvard College, (2) Harvard graduates who are resident at the University as students in the Graduate School, or (3) students of Radcliffe College.

In 1897 the Sohier Prize was awarded to Beulah Marie Dix, of the class of 1897. Subject: "Published Collections of English and Scottish Ballads, 1765-1802."



All candidates must present themselves punctually at 8 A.M. on the FIRST day of the examination (Tuesday in June, Wednesday in September), if they wish to take any examination on that day; otherwise punctually at 8 A.M. on the SECOND day of the examination (Thursday, both in June and September).

Tuesday, June 28, and Wednesday, September 21.

8.00 а.м.	Candidates offering any of the subjects of the first day
	meet the officer in charge of the examinations.
0 44	4.7 1.0

9–11. Advanced German.

11¼-12¼. Advanced Chemistry (written examination).

12¾-1¾. Advanced Algebra. 2-3. Analytic Geometry.

3-4. Advanced Physics (written examination).

4-5. Logarithms and Trigonometry.

5-6. Solid Geometry.

Thursday, June 30, and Thursday, September 22.

8.00 а.м.	Candidates meet the officer in charge of the examinations.
0 11	T31 T - 11

9-11. Elementary Latin.  $11\frac{1}{2}-1\frac{1}{2}$ . Elementary Greek.  $2\frac{1}{2}-3\frac{1}{2}$ . Latin Composition.  $3\frac{3}{4}-5\frac{3}{4}$ . Advanced Latin.

Friday, July 1, and Friday, September 23.

Treating, 5 and 1, and Treating, September 25

8-9. Elementary Physics.

94-114 Geometry (see New Definitions of Requirements).

 $9\frac{1}{4}$ - $10\frac{3}{4}$ . Plane Geometry.

 $11\frac{1}{2}-1$ . Algebra.  $1\frac{1}{2}-3\frac{1}{2}$ . English.

 $3\frac{3}{4}-5\frac{3}{4}$ . Advanced Greek.

Saturday, July 2, and Saturday, September 24.

8-10. Advanced French.

 $10\frac{1}{4}-11\frac{3}{4}$ . History.

12–1. Greek Composition.

 $1\frac{1}{2}$ -3.Elementary French (French A). $3\frac{1}{4}$ - $4\frac{3}{4}$ .Elementary German (German A).

#### Examinations in the Prescribed Studies of the Freshman Year.

In 1898, the examination in English A will be held in accordance with the programme given below. This examination, formerly held in Cambridge only, is now held in June at all the places where the Harvard examinations are held.

Wednesday, June 29, and Tuesday, September 20.

2.45 p.m. Candidates assemble. 3-5. English A.

The examinations in French A and German A are identical with the admission examinations in Elementary French and German, and will be held on Saturday, July 2, and Saturday, September 24.

Examinations in Cambridge will be held at 10 Garden Street.

Monographs prepared by the students are published and sold by Messrs. Ginn & Company.

Besides the present publication, Radcliffe College issues annually a list of its Courses of Study and an Annual Report. These documents, and also separate pamphlets, published by Harvard University, giving detailed accounts of the work of the principal departments, may be had by addressing

Radcliffe College,

Cambridge, Mass.

be M

THE LOWMAN OF THE PHIVENSITY OF ILLINOIS

## Radcliffe College

CAMBRIDGE, MASSACHUSETTS

1900

\*\* The legal title of the Corporation (to be used in making gifts and bequests) is "RADCLIFFE COLLEGE." It should be described as established in Cambridge, Massachusetts.

Correspondence should be addressed to RADCLIFFE COLLEGE, Cambridge, Massachusetts.

The College buildings are open to visitors interested in the work of the College, during both vacations and term-time; though students only are admitted to the class-rooms during the hours of lectures.

The Reference Library is in Fay House.

The Laboratories of Chemistry, Physics and Botany are in buildings on the grounds.

The Laboratory of Biology occupies quarters in the Museum of Comparative Zoölogy on Oxford Street, by permission of the Curator.

The Gymnasium is open to all students without charge.

The Dean and the Secretary may be consulted at Fay House during term-time, and special appointments may be made as required.

The Academic year begins on the Thursday following the last Wednesday in September. In 1900 it is September 27. Students report for registration at 9 A.M. of that day.

The summer vacation begins on the last Tuesday in June, and ends on the last Wednesday in September.

The Christmas recess is from Dec. 23, 1900, to Jan. 2, 1901, inclusive.

The Spring recess is from April 14 to April 20, 1901, inclusive.

### Radcliffe College.

RADCLIFFE COLLEGE, the successor of the Society for the Collegiate Instruction of Women, offers systematic collegiate instruction to women under the professors and other teachers of Harvard University. More than a hundred instructors of the University are teachers in Radcliffe College.

Fay House contains the recitation rooms and offices, and a select working library. The College has four laboratories, of Physics, Chemistry, Botany, and Biology. The collections of the Museum of Comparative Zoölogy, the Peabody Museum of American Archaeology, the University Museums of Geology, Botany, and Mineralogy, and the Semitic Museum, are also open to the students; and, by vote of the President and Fellows of Harvard College, the students have the use of the University Library, containing 500,000 volumes. Opportunities for study in the Astronomical Observatory, the Botanic Garden, and the Herbarium are also afforded.

The requirements for admission are identical with those for admission to Harvard College. The courses of instruction given in Radcliffe College correspond to both "undergraduate" and "graduate" courses offered by Harvard University, and are more than sufficient to enable a woman to perform the work required by the University for the degrees of A. B. and A. M. In addition to these, Graduate Students in Radcliffe College have access to a large number of Graduate courses in Harvard University. The examinations are the same in both institutions, and the diplomas conferring the degrees of A. B. and A. M. are countersigned by the President of Harvard University as a guarantee that these degrees are equivalent to the corresponding degrees given by the University.

For provisions for the admission of Graduate Students and Special Students, see pages 35, 36 and 37.

## Associates of Radcliffe College.

ELIZABETH CARY AGASSIZ.

ANNIE LELAND BARBER, A. M.

EZRA HENRY BAKER, A. B.

WILLIAM ELWOOD BYERLY, PH. D.

ARTHUR ASTOR CAREY, A. B.

MARY COES, A. M.

MARY HUNTINGTON COOKE.

LILIAN HORSFORD FARLOW.

ARTHUR GILMAN, A.M.

STELLA SCOTT GILMAN.

GEORGE LINCOLN GOODALE, M.D., LL.D.

WILLIAM WATSON GOODWIN, PH. D., LL. D., D.C.L.

JOHN CHIPMAN GRAY, LL. D.

JAMES BRADSTREET GREENOUGH, A.B.

HENRY LEE HIGGINSON, A. M.

AGNES IRWIN, LITT. D.

ALICE MARY LONGFELLOW.

ELLEN FRANCIS MASON.

JOHN FARWELL MOORS, A. M.

CHARLES ELIOT NORTON, LITT. D., LL. D.

JAMES MILLS PEIRCE, A.M.

CLEMENT LAWRENCE SMITH, A. M., LL. D.

JOSEPH BANGS WARNER, A.M., LL. B.

SARAH WYMAN WHITMAN.

SARAH YERXA, A. B.

President.

ELIZABETH C. AGASSIZ.

Dean.

AGNES IRWIN.

Trensurer.

HENRY LEE HIGGINSON.

Conneil.

ELIZABETH C. AGASSIZ, Chairman.

AGNES IRWIN.

WILLIAM E. BYERLY.

Ex-officio.

LILIAN HORSFORD FARLOW.

John Chipman Gray.

Joseph B. WARNER.

ALICE M. LONGFELLOW. WILLIAM W. GOODWIN. SARAH W. WHITMAN.

CLEMENT L. SMITH.

Academic Board.

WILLIAM E. BYERLY, Chairman.

ELIZABETH C. AGASSIZ.

AGNES IRWIN.

Ex-officio

JAMES BRADSTREET GREENOUGH. BENJAMIN OSGOOD PEIRCE.

EDWARD LAURENS MARK.

Hans Carl Günther von Jagemann.

JOHN HENRY WRIGHT.

CHARLES HALL GRANDGENT.

SILAS MARCUS MACVANE.

GEORGE LYMAN KITTREDGE.

Secretary.

Mary Coes.

Nibrarian.

CAROLINE A. FARLEY.

Medical Adviser to the College.
HENRY PICKERING WALCOTT, A.B., M.D.

# Standing Committees.

The House Committee in charge of buildings, house-service, grounds, and repairs and additions, Mrs. Whitman, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Miss Longfellow, Mr. Warner, Mrs. Farlow.

The Students' Committee in charge of the general discipline of the students, oversight of their homes while in Cambridge, and of their amusements, clubs, and social life, MISS LONGFELLOW, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Mrs. Farlow, Mrs. Cooke, Miss Coes.

The Library Committee with general supervision of the Library, MRS. FARLOW, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Professor Goodwin, Miss Mason, Professor Greenough.

The Finance Committee in charge of all matters pertaining to expenditure, Endowment Fund, etc., Professor Byerly, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Mr. Gilman, Mr. Warner.

The Committee on the Gymnasium, Mrs. Agassiz (ex-officio), Miss Irwin, Mrs. Farlow, Miss Longfellow, and Mr. Warner.

The College keeps a list of those students who have received degrees or certificates and wish to find positions as teachers, for the information of school officers and others who may require their services.

# REQUIREMENTS FOR ADMISSION TO RADCLIFFE COLLEGE.

# ADMISSION OF CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS.

The requirements for admission to Radcliffe College are the same as those for admission to Harvard College. Radcliffe College holds no independent entrance examinations, but is authorized to make arrangements by which women can take the Harvard Examinations and have their work submitted to the Harvard Examiners. These examinations may be taken in Cambridge, and in other places in which the Harvard examinations are held in June. The September examinations are held in Cambridge only.

Two examinations of candidates for admission will be held in Cambridge in 1900, in Fay House. The days and hours are given in detail on the third page of the cover of this pamphlet.

The academic year begins on Thursday, September 27, 1900. All students register at the Office on that day at nine A. M.

Candidates are required to give at least a week's notice of their intention to present themselves at either examination. A blank will be sent to each applicant, to be filled out and promptly returned to Radcliffe College. Notice of a desire to be examined at any place other than Cambridge must be given not later than June 10.

Every candidate for admission to Radcliffe College is required to furnish a testimonial of honorable dismissal from the school or college which she has attended, or from the tutor with whom she has studied. She must also refer to two persons from whom information about her may be obtained. References should be sent to the Secretary of the college a month before the examination.

A fee of five dollars for the whole examination is to be paid by each candidate in June, and again in September if she then presents herself. For this a receipt will be given and the amount will be deducted from the first payment for tuition. The fee will not be returned to a candidate who does not enter college.

## OLD AND NEW METHOD.

The system of requirements for admission to Radcliffe College heretofore in operation will be continued until 1901. A new system, adopted in May, 1899, will go into full operation in 1900 (see p. 15). A candidate for admission to the College in 1900 or in 1901 may be admitted by either method.

## I. OLD METHOD.

In 1900 and 1901, but not thereafter, candidates for admission to Radcliffe College may be examined in the studies included in the following list and in accordance with the requirements in each study therein defined. The terms on which candidates examined by this method will be admitted are stated as follows:

A candidate may satisfy the requirements for admission to the Freshman Class by passing examinations in —

- (a) All the elementary studies, and at least Two advanced studies.
- (b) All the elementary studies except either German or French, and at least THREE advanced studies.
- (c) All the elementary studies, except either Greek or Latin, and at least FOUR advanced studies, including 6 and either 7 or 8 or 9.
- (d) All the elementary studies except either Greek or Latin and either German or French, and at least FIVE advanced studies, including 6 and either 7 or 8 or 9.

A candidate may be admitted in spite of deficiencies in some of the studies required; but such deficiencies must be made up during her course.

The examinations in the elementary studies will count as one hour each with the exception of those in English, Greek, and Latin, which will count as two hours each. A candidate who prefers in any study to take the paper set under the new method will be allowed to do so.

For regulations relating to the division of the examination, see pp. 31 and 32.

A candidate who has a Preliminary Certificate for examination under the old method may, if she so wishes, take Final Examinations under the new method.

## STUDIES IN WHICH EXAMINATIONS ARE HELD.

The examinations for admission embrace two classes of studies, *Elementary* and *Advanced*.

The Elementary Studies are not treated as equivalent. The Advanced Studies are regarded as occupying equal amounts of time in school, and are of equal importance in the examinations.

## ELEMENTARY STUDIES.

- 1. English. English may be offered either as a Preliminary or as a Final subject. The examination in English will occupy two hours, and will consist of two parts, which, however, cannot be taken separately:—
- I. The candidate will be required to write a paragraph or two on each of several topics chosen by her from a considerable number perhaps ten or fifteen set before her on the examination paper. In 1900 the topics will be drawn from the following works:—

Dryden's Palamon and Arcite; Pope's Iliad, Books I, VI, XXII, and XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Scott's Ivanhoe; De Quincey's Flight of a Tartar Tribe; Cooper's Last of the Mohicans; Tennyson's Princess; Lowell's Vision of Sir Launfal.

The candidate is expected to read intelligently all the books prescribed. She should read them as she reads other books; she is expected, not to know them minutely, but to have freshly in mind their most important parts. In every case, the examiner will regard knowledge of the book as less important than ability to write English.

As additional evidence of preparation, the candidate may present an exercise book, properly certified by her instructor, containing compositions or other written work.

The works prescribed for this part of the examination in 1901 and 1902 are as follows:—

Shakspere's Merchant of Venice; Pope's Iliad, Books I, VI, XXII, XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Cooper's Last of the Mohicans; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

II. A certain number of books are prescribed for careful study. This part of the examination will be upon subject-matter, literary form, and logical structure, and will also test the candidate's ability to express her knowledge with clearness and accuracy.

The books prescribed for this part of the examination are:

In 1900: Shakspere's Macbeth; Milton's Paradise Lost, Books I and II; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

In 1901 and in 1902: Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

No candidate will be accepted in English whose work is seriously defective in point of spelling, punctuation, grammar, or division into paragraphs.

In connection with the reading and study of the prescribed books, parallel or subsidiary reading should be encouraged and a considerable amount of English poetry should be committed to memory. The essentials of English grammar should not be neglected in preparatory study.

The English written by a candidate in any of her examination-books may be regarded as part of her examination in English, in case the evidence afforded by the examination book in English is insufficient. A candidate who has passed the examination in Elementary English with a grade of A or B may take a second examination, which, if passed with a grade of A or B, shall exempt her from the prescription of English A (prescribed Freshman English).

At this second examination, which will be held in September only, a candidate will write one or more compositions on topics to be selected by her from a list comprising subjects in English Literature, the Classics, French and German authors, History, and Science. The examination will occupy two hours.

The attention of candidates who have passed in English at the Preliminary Examination is called to another method of anticipating English A (see p. 33).

- 2. Greek. The translation at sight of simple Attic Prose (with questions on the usual forms and ordinary constructions of the language).
- 3. Latin.—The translation at sight of simple prose (with questions as in Greek).

The passages set for translation must be rendered into simple and idiomatic English. Teachers are requested to insist on the use of good English as an essential part of the candidate's training in translation.

In Latin the following pronunciation is recommended: —  $\bar{a}$  as in father,  $\check{a}$  the same sound but shorter;  $\bar{e}$  like  $\hat{e}$  in  $\hat{f}$ ete,  $\check{e}$  as in set;  $\bar{\imath}$  as in machine,  $\check{\imath}$  as in sit;  $\bar{o}$  as in hole,  $\check{o}$  as in nor;  $\bar{u}$  as in rude,  $\check{u}$  as in put; j like j in year, j and j0 like Greek j1 and j2.

Instructors are requested to teach their pupils in pronouncing Greek to use the *Greek accents*, and to give (for example)  $\alpha$  the sound of a in father,  $\eta$  that of a in fate,  $\iota$  that of i in machine, etc.

It is further recommended that pupils be accustomed, from the beginning of the preparatory course in Greek and Latin, to translate into those languages, both orally and in writing, passages prepared by the teacher on the bases of the prose authors read.

- 4. German. The translation at sight of simple prose.
- 5. French. The translation at sight of ordinary prose.

The passages set for translation in 4 and 5 will be similar to those set at the final examinations in German A and French A respectively,—College courses, each having three hours of instruction a week through the year. The passages set for translation must be rendered into simple and idiomatic English. A knowledge of the language itself, rather than of the grammar, is expected; but proficiency in elementary grammar or facility in writing the language will be accepted as an offset for some deficiency in translation. It is recommended that from the outset attention be given to pronunciation. Wherever possible, care should be taken, during the whole course of preparation, to accustom the pupil to hear and understand spoken German and French.

6. History (including Historical Geography). — Either (1) History of Greece and Rome; or (2) History of the United States and of England.

The following works will serve to indicate the amount of knowledge demanded in History: Oman's History of Greece; Allen's History of the Roman people (the whole), or Leighton's History of Rome (to the death of Commodus); Higginson's Young Folks' History of the United States (to the end of Chapter XXI.) and Johnston's History of the United States for Schools (beginning at § 269); Guest and Underwood's Handbook of English History (to the year 1793), or Gardiner's Student's History of England through Part IX.

The following selections are recommended for additional reading and will be made the basis of optional questions in the examinations \*:—

For Greek History: Curtius's History of Greece, Book I. Ch. I., Book II. Ch. IV., and Book III. Ch. III.

For Roman History: Beesly's The Gracchi, Marius, and Sulla; Tighe's Development of the Roman Constitution.

For American History: Lodge's English Colonies, Chapters II. and XXII.; Morse's John Quincy Adams, Chapters II. and III.; Josiah Quincy's Figures of the Past.

For English History: Macaulay's History of England, Chapters I. and III.

7. Mathematics. — (a) Algebra, through Quadratic Equations. (b) Plane Geometry.

The requirement in Algebra embraces the following subjects; factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem for positive integral exponents and the extraction of roots; putting questions into equations, and the reduction of equations; the ordinary methods of elimination, and the solution of both

<sup>\*</sup> Candidates who take the questions on the Selections will be allowed to omit some of the questions on the corresponding Manual.

numerical and literal equations of the first and second degrees, with one or more unknown quantities, and of problems leading to such equations

8. Physical Science. — Either (1) Astronomy (Young's Lessons in Astronomy, Ginn & Co., omitting the appendix) and Physics (Avery's Elements of Natural Philosophy,\* or Gage's Elements of Physics); or (2) a course of experiments not less than forty in number performed at school by the pupil. These must be selected from a list issued by the University under the title A Descriptive List of Elementary Exercises in Physics, or must be approved by the Department of Physics as the equivalent of those contained in this list.

All teachers who can command the necessary apparatus are requested to present their pupils in (2) rather than in (1). (For the character of the examination in (2) see the note under Advanced Studies 8 and 9.)

#### ADVANCED STUDIES.

The half-courses designated by the letters (a) and (b) in the studies numbered 3, 6, and 7 may be combined at the option of the candidate; and any two of them will be accepted (subject to the conditions stated on page 8, paragraphs c and d) as the equivalent of one whole study.

- 1. Greek. The translation at sight of average passages from Homer or the translation at sight of less difficult passages from both Homer and Herodotus (with questions on the usual forms and ordinary constructions of the language and on prosody).
- 2. Latin.—The translation at sight of average passages from Cicero and Virgil (with questions as in Greek).
- 3. Greek and Latin Composition.—(a) The translation into Attic prose of a passage of connected narrative. (b) The translation into Latin of a similar passage.

In preparing for this subject, it is strongly urged that from an early stage pupils be accustomed to translate into Greek and Latin not merely detached sentences illustrative of constructions, but also passages of connected narrative prepared by the teacher on the basis of the prose authors read. The passages set at the examination will be of this character. Examples of the kind of exercise recommended may be found in the following books: The beginner's Greek Composition, by Collar and Daniell (Boston: Ginn & Co.); Allinson's Greek Prose Composition (Boston: Allyn & Bacon); Woodruff's Exercises in Greek Prose Com-

<sup>\*</sup>The following portions of the 1885 edition may be omitted: sections I. and II. of chap. I. (excepting arts. 23-30), arts. 254-267, 346-349, 371, 411-415, 445-455, 464-467, 470-476, 707-714, 729-745, and the whole Appendix.

position (Boston: Leach, Shewell, & Sanborn); Collar's Practical Latin Composition (Boston: Ginn & Co.); Daniell's Exercises in Latin Composition (Boston: Leach, Shewell, & Sanborn).

- 4. German.—Translation at sight of modern German prose.—Grammar.—Composition based upon the following books: Riehl (Der Fluch der Schönheit).—Freytag (Aus dem Staat Friedrichs des Grossen).—Heine (Die Harzreise).—Goethe (the first three books of Dichtung und Wahrheit).—Lessing (Minna von Barnhelm).—Schiller (Wilhelm Tell and Das Lied von der Glocke).—Thirty pages of lyrics and ballads.
- 5. French.—Translation at sight of standard French prose.—Grammar.—Composition based upon the following books: Daudet (La Dernière Classe—Le Siège de Berlin).—Mérimée (Colomba).—Sandeau (Mlle. de la Seiglière, the play).—Corneille, Racine, Molière (one play by each author).

In advanced German and French, translation at sight will form an important part of the examination. Candidates will be expected to be familiar with the subject-matter as well as the language of the prescribed books. Some of the books may be changed from time to time, but with not less than two years' notice. The passages set for translation into German or French will be suited to the proficiency of those who have begun to study the language in College and have had instruction in it three hours a week for two years.

- 6. Mathematics.—(a) Logarithms; \* Plane Trigonometry, with its applications to Surveying and Navigation. (b) Solid Geometry (or the Elements of Analytic Geometry, if not offered in 7).
- 7. Mathematics (a) The elements of Analytic Geometry (or Solid Geometry if not offered in 6). (b) Advanced Algebra.

The following books will serve to indicate the nature and amount of the requirements in Logarithms and Trigonometry, Solid Geometry, Analytic Geometry and Advanced Algebra.

Logarithms and Trigonometry. Wheeler's Logarithms (Cambridge: Sever) or the unbracketed portions of Peirce's Elements of Logarithms (Boston: Ginn & Co.). Wheeler's Plane Trigonometry (same publishers). Problems in Plane Trigonometry (Cambridge: Sever). Peirce's Mathematical Tables, chiefly to four places (Boston: Ginn & Co.).\*

Solid Geometry. Chauvenet's Geometry, Revised and Abridged (Philadelphia: J. B. Lippincott & Co.), Books VI., VII., VIII., and IX.

<sup>\*</sup> Candidates are required to use at the examinations the four-place tables provided by the University. Teachers unfamiliar with these tables who wish to see them before the examinations should write to the Secretary of Radcliffe College.

Analytic Geometry. Briggs's Analytic Geometry (New York: Wiley & Co.).

Advanced Algebra. Wentworth's College Algebra (Boston: Ginn & Co.), to article 496, omitting in Chapter XV., to § 207, Chapters XVII., XIX., XX., in Chapter XXII., §§ 310-314, in Chapter XXII., §§ 321-331, Chapters XXV., XXVII., XXVII., in Chapter XXIX., §§ 452-463, also § 476.

- 8. Physical Science. Physics. A course of at least sixty experiments in addition to those of Elementary Physics (2), selected from the same or similar manuals, and covering the same subjects, but demanding more skill and more knowledge of physical theories and laws.
- 9. Physical Science. Chemistry. A course of at least sixty experiments in General Chemistry actually performed at school by the pupil.

In Elementary Physics (2), in Advanced Physics, and in Chemistry, the candidate will be required to pass both a written and a laboratory examination. The written examination will test her knowledge of experiments and experimenting as well as her knowledge of principles and results. The laboratory examination will test her skill in experimenting. The candidate will be required to hand in the original note-book in which she recorded the steps and the results of the experiments which she performed at school; and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. The note-book in Physics should contain an index of the exercises which it describes.

A candidate who offers elementary or Advanced Physics or Chemistry will hand in her laboratory note-book at the hour of the laboratory examination. Laboratory note-books will be deposited, after examination, in the Secretary's office, where they will be kept for a reasonable time, subject to the order of the owners.

A candidate examined in June at any place where a laboratory examination is not provided will be required to take such an examination in Cambridge in the autumn; but if she passes the written examination in June and presents a satisfactory note-book, the subject will be temporarily counted in her favor in determining the question of her admission to College. Similarly a Preliminary candidate is allowed to postpone her laboratory examination, until September of the year in which she enters College.

Most pupils need lectures or other oral explanations in addition to the descriptions given in the laboratory manuals. When it is impossible to provide lectures, two text-books treating the subject from different points of view are advantageous.

Descriptive lists of experiments which will meet the requirements in Physics and Chemistry may be procured (at 40 cents each) of the Harvard

Coöperative Society, or of Charles W. Sever, Bookseller, Harvard Square, Cambridge.

#### II. NEW METHOD.

The studies which may be presented in satisfaction of the requirements for admission to the Freshman Class in Radcliffe College are named together in the following lists. The figure attached to each study indicates the relative weight which will be given to that study in determining the question of the candidate's fitness for admission:

Elementary	Advanced
English (4)	
Greek (4)	Greek (2)
Latin (4)	Latin (2)
German (2)	German (2)
French (2)	French (2)
	One of the following four:
Ancient History (2)	Ancient History (2)
or	English and American
English and American	History (2)
History (2)	History of Europe (2)
	History of a period (2)
Algebra (2)	Algebra (1)
Geometry (3)	Logarithms and Trigo-
or	nometry (1)
Plane Geometry (2)	Astronomy (1)
Physics (2)	Physics (2)
Chemistry (2)	Meteorology (1)
Physiography (1)	
Anatomy, Physiology, and	
Hygiene (1)	

A candidate for admission must offer from this list studies amounting to 26 points, of which points at least four must be in advanced studies. The studies offered must include:—

English	4		
One ancient language (Elem. Latin or Elem.			
Greek)	4		
One modern foreign language (Elem. German			
or Elem. French)	2		
Elementary History	2		
Algebra	2		
Geometry or Plane Geometry	3	or 2	
Studies amounting to two points from the fol-			
lowing sciences (Elem. Physics, Chemistry,			
Physiography, Anatomy, etc., Astronomy)	2		
	19	9 or 18	3

No candidate may offer an advanced study who does not at the same time or earlier offer the corresponding Elementary study; but Physics is considered Elementary with respect to Meteorology, and Geometry or Plane Geometry, with respect to Astronomy.

Those candidates who are looking forward to the extended study of English or of any other modern literature are advised to acquire a knowledge of Greek as well as of Latin.

# NEW DEFINITIONS OF REQUIREMENTS.

#### GOOD ENGLISH.

Clear and idiomatic English is expected in all examination papers and note-books written by candidates for admission. Teachers are requested to insist on good English, not only in translations, but in every exercise in which the pupil has occasion to write or to speak English.

# 1. English.

# (As heretofore.)

The examination will consist of two parts, which, however, cannot be taken separately:—

I. The candidate will be required to write a paragraph or two on each of several topics chosen by him from a considerable number—perhaps ten or fifteen—set before him on the examination paper. In 1900 the topics will be drawn from the following works:—

Dryden's Palamon and Arcite; Pope's Iliad, Books I, VI, XXII, and XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Scott's Ivanhoe; De Quincey's Flight of a Tartar

Tribe; Cooper's Last of the Mohicans; Tennyson's Princess; Lowell's Vision of Sir Launfal.

The candidate is expected to read intelligently all the books prescribed. She should read them as she reads other books; she is expected, not to know them minutely, but to have freshly in mind their most important parts. In every case the examiner will regard knowledge of the book as less important than ability to write English.

As additional evidence of preparation, the candidate may present an exercise-book, properly certified by her instructor, containing compositions or other written work.

II. A certain number of books will be prescribed for careful study. This part of the examination will be upon subject-matter, literary form, and logical structure, and will also test the candidate's ability to express her knowledge with clearness and accuracy. The books prescribed for this part of the examination in 1900 are:—

Shakspere's Macbeth; Milton's Paradise Lost, Books I and II; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

No candidate will be accepted in English whose work is seriously defective in point of spelling, punctuation, grammar, or division into paragraphs.

In connection with the reading and study of the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry should be committed to memory. The essentials of English grammar should not be neglected in preparatory study.

The English written by a candidate in any of her examination-books may be regarded as part of her examination in English, in case the evidence afforded by the examination-book in English is insufficient.

## 2, 3. Greek.

# 2. Elementary Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least two school years. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of simple Attic prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) A thorough examination on a prescribed portion of Xenophon (about thirty pages \*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to

<sup>\*</sup>The pages of the more recent Teubner text editions are taken as a standard in this statement.

consist, in part, of writing simple Attic prose, involving the use of such words, constructions, and idioms only as occur in the portion of Xenophon prescribed.

For four years, beginning with 1898, the portion of Xenophon prescribed will be the second book of the Anabasis.

## 3. Advanced Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least *three* school years. The second part of the examination (Greek Composition) is optional, and may be omitted without loss of credit:—

- (a) The translation at sight of Attic prose and of Homer, with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into Attic prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Greek prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the elementary and advanced examinations in Greek is based on the assumption that the candidate has begun the study of Latin at least a year earlier, and has continued it along with her Greek course; otherwise the periods specified would not be sufficient.

In preparation for the elementary examination in Greek, candidates should read from 130 to 170 pages\* of Attic prose. For the advanced examination candidates should read from 30 to 50 pages more of Attic prose, and from 3000 to 5000 verses of Homer. The reading of Homer may be advantageously begun with a thorough study of Iliad, Books I and II (to the catalogue of ships).

The pupil should be constantly guided in proper methods of reading, and trained to read the Greek intelligently, as Greek, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Greek, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Greek Composition, pupils should be trained, from an early stage of the preparatory course, to render into Greek, not merely detached sentences, illustrative of constructions, but

<sup>\*</sup> See footnote p. 17.

also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

# 4, 5. Latin.

## 4. Elementary Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *three* school years. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of simple Latin prose and verse. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) A thorough examination on a prescribed portion of Cicero's speeches (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose, involving the use of such words, constructions, and idioms only as occur in the speeches prescribed.

For four years, beginning with 1898, the portion of Cicero prescribed will be the second, third, and fourth speeches against Catiline.

## 5. Advanced Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *four* school years. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of Latin prose and verse with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into Latin prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the examinations in Latin is made with reference to schools which have a four years' course. Schools which have a five years' course may more advan-

<sup>\*</sup> See footnote, p. 17.

tageously provide for beginning the study of Latin in the first year, with some diminution, if necessary, of the time devoted to it in the last years of the course.

The course of reading pursued in preparation for the examinations in Latin should include:—

- (a) Easy reading, included in or following a suitable introductory book ('Latin Lessons'), amounting to from 30 to 40 pages;\*
  - (b) Nepos (Lives) and Caesar (Gallic War), 90 to 120 pages;
- (c) Cicero, 99 to 120 pages, including the four speeches against Catiline and the speech on the Manilian Law, with additional speeches selected by the teacher;
- (d) Virgil and Ovid, 6000 to 10,000 verses, including the first six books of the Aeneid.

Preparation for the elementary examination alone should include (a) and (b), the four speeches against Catiline, and from 2000 to 3000 verses of Virgil, or of Ovid and Virgil.

The pupil should be constantly guided in proper methods of reading, and trained to read the Latin intelligently, as Latin, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Latin, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Latin Composition, pupils should be trained, from an early stage of the preparatory course, to render into Latin not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

## 6, 7. German.

## 6. Elementary German.

- (a) The translation at sight of simple German prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of simple English sentences, or of easy connected prose, to test the candidate's familiarity with elementary grammar.

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than two hundred pages of easy German (including reading at sight in class).

<sup>\*</sup> See footnote, p. 17.

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugation of the weak and the more usual strong verbs; the declension of articles, adjectives, pronouns, and such nouns as are readily classified; the commoner prepositions; the simpler uses of the modal auxiliaries; the elements of syntax, especially the rules governing the order of words.

Pronunciation should be carefully taught, and the pupils should have frequent opportunities to hear German spoken or read aloud. The writing of German from dictation is recommended as a useful exercise.

#### 7. Advanced German.

- (a) The translation at sight of ordinary German. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of those who have read, in addition to the amount specified under Elementary German, not less than five hundred pages of classical and contemporary prose and verse. It is recommended that the reading be selected from such works as the following: Riehl, Culturgeschichtliche Novellen; Freytag, Bilder aus der deutschen Vergangenheit, Die Journalisten; Kohlrausch, Das Jahr 1813; Schiller, Der dreissigjährige Krieg, Wilhelm Tell, Maria Stuart, Die Jungfrau von Orleans; Goethe, Hermann und Dorothea, Egmont, Iphigenie; Lessing, Minna von Barnhelm. About one half of the amount read should be Nineteenth Century prose.

In the translation into German candidates will be expected to show a thorough knowledge of accidence, the elements of word-formation, the principal uses of prepositions and conjunctions, and the essentials of syntax, especially the uses of the modal auxiliaries, and of the subjunctive and infinitive modes.

It is recommended that the candidate be trained to follow a recitation conducted in German and to answer in that language questions asked by the instructor.

## 8, g. French.

## 8. Elementary French.

(a) The translation at sight of ordinary Nineteenth Century prose. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into French of simple English sentences or of easy connected prose, to test the candidate's familiarity with elementary grammar. Proficiency in grammar may also be tested by direct questions, based on the passages set for translation under (a).

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than four hundred pages (including reading at sight in class) from the works of at least three different authors. It is desirable that a portion of the reading should be from works other than works of fiction.

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugations of regular verbs, of the more frequent irregular verbs, such as aller, envoyer, tenir, pouvoir, voir, vouloir, dire, savoir, faire, and those belonging to the classes represented by ouvrir, dormir, connaître, conduire, and craindre; the forms and positions of personal pronouns and of possessive, demonstrative, and interrogative adjectives; the inflection of nouns and adjectives for gender and number, except rare cases; the uses of articles, and the partitive constructions.

Pronunciation should be carefully taught, and pupils should have frequent opportunities to hear French spoken or read aloud. The writing of French from dictation is recommended as a useful exercise.

# 9. Advanced French.

- (a) The translation at sight of standard French. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of candidates who have read, in addition to the amount specified under Elementary French, not less than six hundred pages of prose and verse from the writings of at least four standard authors. A considerable part of the amount read should be carefully translated into idiomatic English.

Candidates will be expected to show a thorough knowledge of accidence and familiarity with the essentials of French syntax, especially the uses of tenses, modes, prepositions, and conjunctions.

It is recommended that the candidate be trained to follow a recitation conducted in French and to answer in that language questions asked by the instructor.

# 10, 11. History (including Historical Geography).

# 10. Elementary History.

Either of the two following groups, each including two fields of historical study: —

- 1. Greek and Roman History.—(a) Greek History to the death of Alexander, with due reference to Greek life, literature, and art. (b) Roman History to the accession of Commodus, with due reference to literature and government.
- 2. English and American History. (a) English History, with due reference to social and political development. (b) American History, with the elements of Civil Government.

For preparation in each of the two historical fields presented, a course of study equivalent to at least three lessons a week for one year will be necessary.

The candidate will be expected to show on examination such general knowledge of each field as may be acquired from the study of an accurate text-book of not less than 300 pages, supplemented by suitable parallel readings amounting to not less than 500 pages. The examination will call for comparison of historical characters, periods, and events, and in general for the exercise of judgment as well as of memory. Geographical knowledge will be tested by means of an outline map.

In the judgment of the Department of History it is desirable that Greek and Roman History be offered as a part of the preparation of every candidate.

# 11. Advanced History.

Any one of the four courses of study which follow: -

- 1. Greek History to the destruction of Corinth and Roman History to the death of Constantine (open to those candidates only who have offered English and American History as an elementary study).
- 2. English History and American History (open to those candidates only who have offered Greek and Roman History as an elementary study).
- 3. European History from the Germanic conquests to the beginning of the Seventeenth Century.
- 4. A year's study of any one of the four historical fields defined under Elementary History and not already offered by the candidate, together with a year's detailed study of a limited period \* within that field, selected with the approval of the Department of History.

<sup>\*</sup>For example, the Spartan and Theban supremacies, the period of the Punic wars, the Stuart Period, the transition from the American colonial to the federal system.

The examination in the second part of 4 will be specially adapted to the particular period selected and will be held in Cambridge only.

In every case the candidate will be expected to show on examination such an acquaintance with the whole field as may be gained from the study of good text-books, together with substantial parallel readings, and, further, such a detailed knowledge of some part of the field as may be gained from suitable topical study. A higher standard of acquirement and of power to combine results will be expected than in the elementary requirement.

As further evidence of the candidate's proficiency satisfactory written work, done at school and certified by the teacher, must be submitted at the time of the examination. It must be presented in the form of a notebook (or bound collection of notes), containing not less than 50 written pages on each historical field offered, and must show practice in some of the following exercises:—

- (a) Notes and digests of the pupil's reading outside of the text-books.
- (b) Brief written tests requiring the application to new questions of knowledge previously acquired.
  - (c) Parallels between historical characters or periods.
- (d) Short studies of topics limited in scope, prepared outside of the class-room and illustrated by some reference to contemporary material.
- (e) Historical maps or charts showing explorations, migrations, conquests, territorial changes, or social conditions.

## 12-15. Mathematics.

A thorough practical acquaintance with ordinary Arithmetic is assumed as underlying all preparation in Mathematics. Knowledge of the fundamental principles of Arithmetic and careful training in accurate computation with whole numbers and with vulgar and decimal fractions form an essential part of early school work. But the pupil's time should not be wasted in the solution by arithmetic of puzzling problems which properly belong to algebra, or in complicated and useless reductions, or in the details of commercial arithmetic. It is desirable that some familiarity with algebraic expressions and symbols, including the methods of solving simple equations, be acquired in connection with the course in Arithmetic.

# Elementary Mathematics.

12. Elementary Algebra.—Algebra, through Quadratic Equations. (As heretofore.)

The requirement in Algebra includes the following subjects: factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of

exponents; radicals and equations involving radicals; the binomial theorem for positive integral powers of the binomial, and the extraction of roots; putting questions into equations and the reduction of equations; the ordinary methods of elimination and the solution of both numerical and literal equations of the first and second degrees with one or more unknown quantities and of problems leading to such equations.

The student should cover carefully the whole ground here specified, and should acquire a thorough understanding not only of the practice, but of the reasons involved in the elementary algebraic rules; for example, in the rules of multiplication, of signs, and of exponents, in the rules for fractions, and in those relating to the reduction and solution of equations. She should train herself to practical skill by the solution of a large number of examples, and should learn to do her work with reasonable quickness, as well as with confidence, accuracy, and clearness. The solution of fairly complicated literal quadratics, the various methods of elimination for equations of the first two degrees, the putting of problems in a neat manner into equations, and the working of the various algebraic operations both for integral and fractional expressions may be mentioned as important subjects of attention. The student should be taught to arrange her work in a clear, orderly, and compact fashion.

The time supposed to be devoted to the systematic study of the requirement in Algebra is the equivalent of a course of three lessons a week through two school years.

13. Geometry.—Plane and Solid Geometry, including problems in mensuration of plane and solid figures, and original propositions in Plane Geometry.

Geometric education should begin in the kindergarten or primary school, where the child should acquire familiarity through the senses with simple geometric forms, by inspecting, drawing, modelling, and measuring them, and noting their more obvious relations. This study should be followed, in the grammar school, by systematic instruction in Concrete (or Observational) Geometry, of which geometric drawing should form a part. Such instruction should include the main facts of Plane and Solid Geometry, treated as matters of observation, and not as exercises in logical deduction, without however necessarily excluding the beginnings of deductive proof as soon as the pupil is ready for them. Concrete Geometry is believed to have important educational value, and to prepare an excellent foundation for the later study of Formal Geometry. It belongs, however, to the earlier stages of school work, and should not be postponed until the time that belongs to direct preparation for college or the scientific school.

In teaching Formal Geometry, stress should be laid from the outset on accuracy of statement and elegance of form, as well as on clear and strict reasoning. As soon as the pupil has begun to acquire the art of rigorous

demonstration, her work should cease to be merely receptive, she should be trained to devise constructions and demonstrations for herself, and this training should be carried through the whole of the work in Plane Geometry. Teachers are advised, in their selection of a text-book, to choose one having a clear tendency to call out the pupil's own powers of thought, prevent the formation of mechanical habits of study, and encourage the concentration of mind which it is a part of the discipline of mathematical study to foster. The subject of Geometry, not a particular treatise, is what the pupil should be set to learn; and its simpler methods and conceptions should be made a part of her habitual and instinctive thought. Lastly, the pupil should be stimulated to good work by interest in the study felt and exhibited by the teacher.

The requirement in Geometry embraces the following topics: the general properties of plane rectilinear figures; the circle and the measure of angles; similar polygons; areas; regular polygons, and the measure of the circle; the relations of planes and lines in space; the properties and measure of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle. The propositions required under these several heads are those only which are contained in the older treatises, and which are recognized as constituting the Elements of Geometry. The examination does not include the additions introduced into some recent text-books, although most of those additions are in themselves valuable for the student who has time and taste for extra study in this field. A syllabus of the required propositions has been prepared. [This syllabus may be obtained, price 10 cents, at the Publication Office, 2 University Hall, Cambridge.]

The examination in Geometry also includes original propositions in Plane Geometry, based on the propositions named in the syllabus, and problems in mensuration in both Plane and Solid Geometry; but excellence in bookwork and in exercises immediately illustrating bookwork will be allowed to offset in part any lack of skill in original work.

The time which it is recommended to assign to the systematic study of the requirement in Formal Geometry is the equivalent of a course of five lessons a week for one school year; but it is believed to be advisable to extend this allowance of time over two years.

- 13a. Plane Geometry. (As heretofore.)
- 13b. Solid Geometry. (As heretofore.)

## Advanced Mathematics.

14. Logarithms and Trigonometry.—The theory of logarithms and the use of logarithmic tables.—Plane trigonometry.—The solution of the right spherical triangle.—Applications to simple problems.

No technical knowledge of the subjects of surveying and navigation, such, for instance, as the methods of parallel or middle latitude sailing, will be required, but such terms as latitude, longitude, angle of elevation or depression, bearing, etc., should be understood. At the examination, candidates are furnished with four-place tables belonging to the University, and are not allowed to use their own tables. The tables provided are distributed before the hour of examination, so that candidates may have at least an hour for becoming acquainted with their arrangement and use. Teachers who wish a still earlier opportunity of seeing these tables should write to the Secretary.

# 15. Advanced Algebra. (Substantially as heretofore.)

The requirement in Advanced Algebra includes the following subjects:—

- (a) Simultaneous quadratics and equations solved like quadratics; properties of quadratic equations; addition, subtraction, multiplication and division of complex quantities; inequalities; variations; arithmetical and geometrical progressions; mathematical induction; simple problems in choice and chance; continued fractions; scales of notation.
- (b) Determinants, not including the multiplication theorem; simple applications of determinants to linear equations; the solution of numerical equations of higher degree, and so much of the theory of equations (not including multiple roots or Sturm's theorem) as is necessary for this purpose.

The topics included under (a) may be treated briefly. About half the time devoted to the requirements should be spent on the topics included under (b).

# 16-22. Physical Science.\*

# Elementary Physical Science.

16. Elementary Physics. — A course of study dealing with the leading elementary facts and principles of physics, with quantitative laboratory work by the pupil.

The instruction given in this course should include qualitative lecture-room experiments, and should direct especial attention to the illustrations and applications of physical laws to be found in every-day life. The candidate is required to pass a written examination, the main object of which will be to determine how much she has profited by such instruction. This

<sup>\*</sup>The rules on p. 14, relating to the time of handing in note-books and to candidates examined in June in places where no laboratory examination is provided, applies to candidates examined under the new method also.

examination may include numerical problems. It will contain more questions than any one candidate is expected to answer, in order to make allowance for a considerable diversity of instruction in different schools.

The pupil's laboratory work should give practice in the observation and explanation of physical phenomena, some familiarity with methods of measurement, and some training of the hand and the eye in the direction of precision and skill. It should also be regarded as a means of fixing in the mind of the pupil a considerable variety of facts and principles. The candidate is required to pass a laboratory examination, the main object of which will be to determine how much she has profited by such a laboratory course.

The candidate must name as the basis for her laboratory examination at least thirty-five exercises selected from a list of about sixty, described in a publication issued by the University under the title, "Descriptive List of Elementary Exercises in Physics." In this list the divisions are mechanics (including hydrostatics), light, heat, sound, and electricity (with magnetism). At least ten of the exercises selected must be in mechanics. Any one of the four other divisions may be omitted altogether, but each of the three remaining divisions must be represented by at least three exercises.

The candidate is required to present a note-book in which she has recorded the steps and the results of her laboratory exercises, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes. These exercises need not be the same as those upon which the candidate presents herself for the laboratory examination, but should be equivalent to them in amount and grade of quantitative work.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in physics. Experience has shown that pupils can make the original record of their observations entirely presentable, so that copying will be unnecessary, and they should in general be required to do so.

This course, if taken in the last year of the candidate's preparation, is expected to occupy in laboratory work, recitations, and lectures, five of the ordinary school periods, about fifty minutes in length, per week for the whole year. With few exceptions exercises like those in the Descriptive List already mentioned can be performed in a single school period, but for satisfactory results it will often be necessary to repeat an exercise. Two periods per week for the year should be sufficient for the laboratory work proper. If the course is begun much earlier than the last year of the candidate's preparation, as it well may be, it will require more time.

17. Chemistry.\*—A course of at least sixty experiments, performed at school by the pupil and accompanied with systematic instruction in principles and their applications, in accordance with directions given in a pamphlet entitled "An Outline of Requirements in Chemistry," issued by the University for the use of teachers only.

The candidate is required to pass both a written and a laboratory examination. The written examination will test her acquaintance with the facts and principles of Chemistry. The laboratory examination will test both her skill in performing experiments and her grasp of the principles involved in them. The candidate is further required to present the original note-book in which she recorded the steps and results of the experiments which she performed at school, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in Chemistry.

18. Physiography. — A course of study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Physiography," issued by the University.

For the form of examination see note under Astronomy, below.

19. Anatomy, Physiology, and Hygiene. — A course of study and laboratory work equivalent to that described in a pamphlet entitled "An Outline of Requirements in Anatomy, Physiology, and Hygiene," issued by the University.

The candidate will be required to pass both a written and a laboratory examination. The written examination will test the range and thoroughness of her knowledge of the elements of Anatomy, Physiology, and Hygiene. The laboratory examination will test (a) her ability to perform the experiments described in the Outline of Requirements, and (b) her knowledge of the first aids to be rendered to the injured.

At the time of the written examination the candidate must present the original note-book containing (with dates) the notes and drawings she has made in the course of her laboratory work, and bearing the endorsement of her teacher, certifying that the book is a true record of the pupil's own observations and experiments. An index of subjects should be appended.

<sup>\*</sup>The course will be mainly an experimental course in theoretical chemistry, but there will be experiments covering all branches of pure chemistry.

# Advanced Physical Science.

## 20. Advanced Physics. \* (Substantially as heretofore.)

The University does not prescribe the experiments to be performed by those offering this subject for admission. The work should, however, be of advanced grade, almost wholly quantitative, and conducted with apparatus, not necessarily elaborate, yet capable, if carefully handled, of yielding results of such accuracy as to warrant the consideration of somewhat minute error. For example, the balance used in weighing should be so delicate as to justify corrections for the buoyancy of the air on the weights and on the body weighed, and, in the determination of specific gravity, for the temperature of the water. The results should be discussed with reference to their precision and to the number of significant figures. There should be about sixty experiments well distributed through the range of general physics. If the student has devoted a considerable amount of time in the elementary course to experiments in heat, that division of physics may be here omitted. The laboratory work can be performed properly only in periods of considerable length, two to four hours, for example.

Instruction by lectures or text-books and work in problems should be a part of the course.

The candidate will be required to pass both a laboratory and a written examination. She should so thoroughly understand the work which she has performed as not to be confused in the laboratory examination by unfamiliar forms of apparatus.

The laboratory note-book will receive careful attention at the time of the examination. It must contain a certificate from the teacher that it is a true record of the candidate's work.

21. Meteorology.—A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Meteorology," issued by the University.

This course requires a knowledge of Elementary Physics. (For the form of examination see under Astronomy, below.)

22. Astronomy.—A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Astronomy," issued by the University.

This course requires a knowledge of Geometry.

In Physiography, Meteorology, and Astronomy, the candidate will be required to take both a written and a laboratory or practical examination. The written examination may test her understanding of observational methods appropriate to the subject, but will call chiefly for a knowledge of facts and principles. The laboratory or practical examination will

<sup>\*</sup>Equivalent to, but not necessarily identical with, Physics C.

test her skill in observation as well as her grasp of principles. This examination can be taken in Cambridge only; for those who are examined elsewhere in June, it will be postponed to September.

The laboratory examination in Physiography may include the description, explanation, and comparison of geographical features shown in photographs, maps and models. The laboratory examination in Meteorology may include the use of instruments, the discussion of observations, and the construction and interpretation of weather maps and climatic charts. The practical examination in Astronomy may call for an ability to make simple naked-eye and instrumental observations, and to establish the simpler generalizations of astronomy by discussion of these observations.

The candidate in these subjects will be required to present, at the time of the laboratory or practical examination, the original note-book in which she recorded, with dates, the steps and results of the observations which she made at school. This book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. An index of subjects should be appended. The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of her work through an extended course of observational study, and that her work has been of a satisfactory character; but greater weight will be given to the practical or laboratory examination than to the note-book in determining the candidate's attainments.

# EXAMINATION PAPERS.

A set of recent examination papers will be sent free to any address, on application to the Secretary.

## DIVISION OF THE EXAMINATION.

A candidate for admission may take the entire examination at one time, or she may divide it between two years, or between June and September of the same year. In the former case she is known as a "Preliminary; Candidate," in the latter as a "Postponer." A Preliminary Examination is always taken a year or more before the Final Examination. Postponing candidates, whether in September or June, are taking Final Examinations.

If a study under the old method consists of two parts, designated by the letters (a) and (b), the examinations in those parts may be taken separately by a candidate who divides her examinations for admission either between two years or between June and September of the same year. No other study may be divided.

Under the *old* method, every study will be counted according to the number of hours it formerly occupied in the examination programme as follows:—

	Eler	nenta	ary.	Advanced.	
English .			2 hours	Greek 2 hour	rs
Greek .			2 " .	Latin 2 "	
Latin .			2 "	Greek Composition 1 hour	r
German.			1 hour	Latin Composition 1 "	
French .			I "	German 2 hou	rs
History .			ı "	French 2 "	
Algebra.			ı "	Logs. and Trig 1 hou	r
Geometry			I "	Solid Geometry . I "	
Physics.			I "	Analytic Geometry 1 "	
				Algebra, 1 "	
				Physics 2 hour	rs
				Chemistry 2 "	

Under the new method in each study numbered in bold-faced type (1, 2, 3 etc.) there is one examination which cannot be divided.

#### PRELIMINARY EXAMINATIONS.

A candidate may pass a Preliminary Examination in some of the studies, and be examined in the remaining studies in some subsequent year. For the Preliminary Examination the candidate must present herself in June, having previously sent in a certificate of preparation.

A Preliminary certificate will be granted to any candidate under the old method who passes the examination in studies occupying five hours on the examination programme; and to any candidate under the new method who passes the examination in studies rated in the aggregate at eight points.

. Candidates may offer themselves for the Preliminary Examination in any studies, elementary or advanced, in which their teachers certify that they are prepared, and in no others.

## OPTIONAL EXAMINATIONS. ANTICIPATION OF COLLEGE STUDIES.

In addition to the examinations required for admission to Radcliffe College, optional examinations are provided for such candidates as have extended their studies beyond the requirements.

- I. A candidate may present herself for examination in any of the Advanced Studies not offered by her for admission, and thus qualify herself to pursue more advanced courses in those subjects in College.
- II. A candidate may present herself for additional examination in any prescribed course or courses of the Freshman year.

Studies anticipated may be counted toward the degree of Bachelor of Arts in the manner herein provided; but the grade of scholarship attained in anticipated study is not counted toward distinction or honorable mention with the degree:—

- (1) If the studies anticipated amount to one half of the work of the Freshman year, the student may, upon application, be admitted to the Sophomore class, subject to the condition of making up the deficiency in her Freshman Studies.
- (2) In any case, the studies anticipated shall be placed to the student's credit, and may be used towards satisfying the requirements for the degree of Bachelor of Arts, in either of the following ways:—
- (a) The student may obtain leave from the Academic Board to fulfil the requirements for the degree in three years by taking additional elective studies.
- (b) The number of courses regularly required in the Senior year, or in the Senior and Junior years, may be reduced by the amount of the studies anticipated. Permission to make such reduction will be granted, however, only for the purpose of enabling the student to devote time thus gained to her remaining studies.

Applications under (a) and (b) will not ordinarily be acted upon until the close of the student's first year; and the decision upon them will depend upon the quality of the student's record both in her examination for admission, and in her college work.

# ANTICIPATION OF PRESCRIBED ENGLISH. (ENGLISH A.)

The examination of candidates who anticipate the English of the Freshman year is as follows\*:—

Composition: Hill's Principles of Rhetoric (edition of 1895); Practice in Writing. — Literature: Swift's Battle of the Books and Gulliver's Travels; Defoe's Robinson Crusoe (Part 1); The Sir Roger de Coverley Papers in the Spectator; Pope's Rape of the Lock, Epistle to Arbuthnot, and Iliad I, VI, XXII; The lives of Swift, Defoe, and Pope in the English Men of Letters Series; Thackeray's English Humorists and Henry Esmond.

For another method of anticipating Prescribed Freshman English (English A), see page 10.

#### Admission to Advanced Standing.

Students may be admitted to advanced standing either (I.) by examination, or (II.) from other colleges without complete examination.

\*Elective courses in English are open, on the same terms as to Sophomores, to students who have anticipated the prescribed English of the Freshman year.

- I. BY EXAMINATION. A candidate may be admitted to the Sophomore, Junior, or Senior Class, if she appear on examination to be versed in the following studies:—
  - 1. The studies required for admission to the Freshman Class.
- 2. All the prescribed studies already pursued by the class for which she offers herself, and as many elective studies as she would have pursued if she had entered at the beginning of the course.

Examinations for advanced standing are held in such courses only as are intended primarily for undergraduates; and, among these, in such only as may reasonably be anticipated by examination. No laboratory course, no course in composition or discussion, and no other course in which an examination is obviously an inadequate test may be offered for admission to advanced standing.

A candidate may be admitted in spite of deficiencies in some of these studies; but no candidate so admitted will be recommended for the degree until she has made good such deficiencies to the satisfaction of the Academic Board.

Candidates for admission to advanced standing may divide the examination between June and September; but a candidate who fails in any subject in June will not be examined again in that subject in September.

The Secretary must receive, not later than September 10, a written notice specifying the elective course or courses in which the candidate wishes to be examined.

II. WITHOUT COMPLETE EXAMINATION. Graduates of other colleges, and students from the higher classes of other colleges may be admitted without examination, and assigned to those classes for which their previous training seems to qualify them. Every case is decided on its own merits; but students from other colleges are not admitted *ad eundem* without examination.

Applications are acted upon at any season of the year. Every person wishing to enter Radcliffe College under this provision must make a complete written statement of the work on which she bases her application. In this she should state how old she is; at what school or schools she received her preparatory training; how long she attended each school; what she studied; how much time she gave to each of the more important studies; and how far she advanced in each before she entered college.

Blank forms of application for admission to advanced standing may be obtained from the Secretary.

Much importance is attached to the quality of the work offered. The applicant is expected to furnish official statements showing her rank or grade in her various college studies; and letters, or other evidence, showing the opinion her instructors have formed of her character and scholarship.

Candidates from other colleges may be admitted to Radcliffe College in spite of some deficiencies in their work, on condition that they shall make good these deficiencies before receiving a degree. Deficiency in one direction may be offset by unusual attainments in another.

## SPECIAL STUDENTS.

Applicants who pass a satisfactory examination on a smaller number of subjects than are called for in the full Requirements may be admitted, at the discretion of the Academic Board, to such special courses as they seem qualified to pursue.

Students of mature age, who wish to pursue chiefly higher courses of study, may be admitted, at the discretion of the Academic Board, without passing the examination for admission, provided that they satisfy the instructors in the courses which they elect of their fitness to pursue them.

All special students are expected to take four courses of study.

Special students may, on application, receive certificates at the end of their term of study, stating the courses in which they have passed satisfactory examinations, and giving the grade to which they have been assigned in each course.

Special students should make application before the first day of September.

## STUDENTS AND EXAMINATIONS.

Undergraduates are expected to make their choice of elective studies before the first day of September, and no changes are allowed after October 5, except by leave of the Academic Board. Applications for changes must be made in writing, with a statement of reasons.

The student's choice is limited to those studies which her previous training qualifies her to pursue; and she must observe any restrictions that may be attached to the particular courses she wishes to select. She is further required to avoid any conflict of recitation hours or of examinations between her courses.

No starred (\*) course may be chosen without the *previous* consent of the Instructor. Application should be made, if possible, before the summer vacation.

An undergraduate who wishes to take a Graduate course is required to consult the Instructor in advance; if possible, she should do this before the summer vacation. She will be admitted to the course on the recommendation of the Instructor, which must be given in writing.

Not more than one Course of Research may be taken in any year by an undergraduate.

All students are expected to attend the exercises and to pass all the examinations in the courses which they elect, unless excused by special vote of the Academic Board. Applications for excuses must be made to the Secretary in writing with the reasons.

## LODGINGS FOR STUDENTS.

Students may learn of lodging-places approved by the Students' Committee by enquiring of the Dean. The ladies of the Standing Committees will be glad to assist students by their advice, whenever it is necessary.

All arrangements for boarding and lodging are to be subject to the approval of the Dean, and the Secretary must be kept constantly informed of the address of every student.

## GRADUATE STUDENTS.

#### ADMISSION.

Bachelors of Arts of Radcliffe College, and Graduates of other Colleges of good standing who present satisfactory evidence of character and qualifications, are admitted without examination as Graduate Students in Radcliffe College.

An application for admission may be made by filling out and depositing a registration blank at the office. If the applicant is not a graduate of Radcliffe College, she must also file, for the consideration of the Academic Board, satisfactory certificates of scholarship and character; and if she holds a degree from any institution, she must present diplomas or official certificates, sufficient to furnish evidence of such degree or degrees.

Admission as a Graduate Student does not imply admission to candidacy for a Degree.

#### RESIDENCE.

Graduate Students are required to be in regular attendance on the exercises in some course or courses of instruction, and to do all the required work (including all examinations) in the courses which they elect; or to carry on regular work in some Laboratory or Museum or in the Library, under the frequent inspection and criticism of some specified instructor or instructors.

#### STUDIES.

The instruction open to students in Radcliffe College is arranged in one list of Courses of Instruction, consisting of Full Courses and Half-Courses,

These are distributed into three groups in the several branches of study, namely,

- (1) Courses designed primarily for Undergraduates.
- (2) Courses for Graduates and Undergraduates.
- (3) Courses primarily for Graduates.

Any course (or half-course) in the list is open to all Graduate Students who present sufficient evidence of qualification for that course. It is sometimes advisable, and is not unusual, for a Graduate student to choose some of her studies from the First, or Undergraduate, Group; but such studies are not ordinarily counted for the degree of A. M. Many of the studies of the Second Group are distinctly of Graduate grade, in the sense of being in advance of such as are ordinarily pursued for a Bachelor's degree. They are thorough and comprehensive courses, characterized by advanced methods of instruction and study; and are in fact largely chosen by Graduate Students, and found to be suitable to their needs. To some of these courses, undergraduates are admitted only by special leave of the instructor. To the courses of the Third Group, undergraduates are admitted only on the recommendation of the instructor.

Among the higher courses of instruction—of the Second and Third Groups—in nearly every department of study, are Courses of Research and Seminaries, for students who wish to do special work of an advanced character. These courses are carried on under various plans of administration in the several departments, but always with the object of affording opportunity for regular independent study.

A complete year's work for a Graduate Student regularly consists of four full courses of instruction, of advanced grade, or of their equivalent in courses and half-courses, pursued with high credit throughout an academic year. All the work required in such courses must be done, and all the examinations must be passed; unless the student has leave from the Academic Board, with the approval of the Instructor, to omit some part of the ordinary requirement.

A student who wishes to devote her time, largely or wholly, to special study of an advanced character may count a course embracing such study as equivalent to more than one course, up to a complete year's work, or may carry on such study outside and in place of the regular courses, under the direction and supervision of some specified Instructor or Instructors. In either case, the substitution proposed must have the approval or consent of the Instructor or Instructors concerned; and the permission of the Academic Board is required.

## DEGREES.

The requirements for the degrees of Bachelor of Arts and Master of Arts are the same as for the corresponding degrees in Harvard University.

The diplomas are countersigned by the President of Harvard University and bear the University seal.

The ordinary requirements for the degree of Master of Arts for a Bachelor of Arts of Radcliffe College, or for any student who has been accepted, without special conditions, as qualified for candidacy for the degree on the ground of her previous studies, consists in a full year of residence and study in Radcliffe College, devoted to work approved by the Academic Board of the College as affording suitable preparation for the degree, and completed with high credit. Special conditions are, however in some cases imposed on the admission to candidacy of a student who is not a Bachelor of Arts of Radcliffe College.

The work approved by the Academic Board for the degree of Master of Arts may consist, wholly or partly, of research or special study, either in connection with or outside of the courses of instruction, carried on under the direction or with the criticism and approval of a specified instructor; or it may be made up of courses of instruction of advanced grade, four such courses being ordinarily required as constituting a full year's work. In any case the programme of study must form a consistent plan of work to be pursued with some definite aim, although it need not lie wholly in one department or field.

## TUITION FEES.

The annual tuition fee for a student doing full work is two hundred dollars, in addition to the special laboratory fees named below. It is payable, one hundred and twenty-five dollars on October 1, seventy-five dollars on February 1.

For those students who are permitted by the Academic Board to take less than four courses the charges are as follows:—

For any regular course not a laboratory course or course of research, sixty dollars; for any half-course, not a laboratory course, thirty dollars; for a course of research or for a laboratory course, besides the special laboratory fees, a sum equal to the fee for one, two, or more courses, according to the number of courses to which the Academic Board shall consider it equivalent as part of the student's work for the year. But the minimum fee charged for any student is forty dollars, and the maximum fee, in addition to the special laboratory fees, is two hundred dollars, coveringany number of courses.

Two-thirds of the fee is payable on the first day of October, the remaining third on the first day of February.

Students in laboratory courses pay in addition a special laboratory fee of five dollars for each course or half-course.

No student will be admitted for any shorter time than a whole academic year, except by special vote of the Academic Board.

At a meeting of the Council of Radcliffe College on December 5th, 1898, it was voted that no student be permitted to attend any College exercise after October 15th in any year unless all bills previously rendered for that year have been paid; and similarly that no student be permitted to attend any College exercise after March 1st unless all bills previously rendered have been paid; and that in no event shall any degree be conferred unless all dues to the College have been paid at least twenty-four hours before Commencement Day.

## SCHOLARSHIPS.

By gift of the Alumnae and students of the "Harvard Annex" and their friends, an annual scholarship has been established to be known as "The Harvard Annex Scholarship founded by Alumnae of Radcliffe College." The fund provides for the tuition-fees of one student.

In 1899-1900 this scholarship was awarded to IDA PRESCOTT CLOUGH, of the Class of 1896. The accumulated income made it possible to give this year a second Scholarship, which was awarded to LAURA DANA PUFFER, A. M., 1899.

## THE ELLEN M. BARR SCHOLARSHIPS.

By the terms of the will of the late Ellen M. Barr, the residue of her estate, after the payment of debts and legacies, was bequeathed to Radcliffe College. Subject to the payment of an annuity, the income of this bequest is to be applied "in the form of annual scholarships of not less than two hundred and fifty dollars and not more than three hundred dollars each, for the benefit of students in Radcliffe College, who, in point of character, ability and physical constitution, give promise of future usefulness, and who stand in need of pecuniary assistance."

In 1899-1900 five scholarships from this fund of the value of \$250.00 each, were awarded to Lucy Katharine Fuller, Katharine Elizabeth Fullerton, Mary Teresa Loughlin, Clara Frances McIntyre, of the class of 1900, and Caroline Barnard Shaw of the class of 1901.

Applications for the year 1900-1901 should be in the hands of the Dean by the first day of June, 1900.

## THE ELLA LOWELL LYMAN MEMORIAL SCHOLARSHIP.

By gift of Mr. Arthur T. Lyman of Boston, an annual scholarship has been established in memory of his wife, Ella Lowell Lyman. The fund provides for the tuition fees of one student.

In 1899-1900 this scholarship was awarded to Helen Margaret Ferguson Byron of the class of 1900.

Applications for the year 1900-1901 should be in the hands of the Dean by the first day of June, 1900.

## THE ELIZABETH CARY AGASSIZ SCHOLARSHIP.

The Elizabeth Cary Agassiz Scholarship is a gift to Radcliffe College from various friends of Mrs. Agassiz, who have wished that it should bear her name. The fund provides for the tuition fees of one student.

In 1899-1900 this scholarship was awarded to Cora Frances Roper, of the class of 1900.

Applications for the year 1900-1901 should be in the hands of the Dean by the first day of June, 1900.

## THE AGNES IRWIN SCHOLARSHIP.

By gift of six hundred and eighty former pupils of the first Dean of Radcliffe College, the Agnes Irwin Scholarship has been established. By the terms of the gift the student to have the benefits of this scholarship is to be appointed by Miss Agnes Irwin, and all details regarding it are to be arranged by her for the present and the future. The fund provides for the tuition fees of one student.

In 1899-1900 this scholarship was awarded to ELIZABETH MANNING GARDINER, of the class of 1901.

Applications for the year 1900-1901 should be in the hands of the Dean by the first day of June, 1900.

# THE WIDOW JOANNA HOAR SCHOLARSHIP.

The College has established The Widow Joanna Hoar Scholarship with funds contributed by an unknown friend in memory of the widow of Charles Hoar, Sheriff of Gloucester in England, who came to America with her children in 1638. In awarding this scholarship preference is to be given to natives of Concord, Mass., or to daughters of citizens of that place. The fund at present provides for the tuition fees of one student.

In 1899-1900 this scholarship was awarded to MARY RHOADES HUNT, of the class of 1900.

Applications for the year 1900-1901 should be in the hands of the Dean by the first day of June, 1900.

## THE MARIA DENNY FAY MEMORIAL SCHOLARSHIP.

An annual scholarship of two hundred dollars (\$200) has been established, which provides for the tuition fees of one student.

In 1899-1900, this scholarship was awarded to ALICE DEMARY CHAMBERLAIN of the class of 1900.

Applications for the year 1900-1901 should be in the hands of the Dean by the first day of June, 1900.

#### THE JOSIAH M. FISKE MEMORIAL SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske, of New York City, an annual scholarship has been established in memory of her late husband, Josiah M. Fiske, who was once a resident of Cambridge. The fund provides for the tuition fees of one student.

In 1899-1900 this scholarship was awarded to MABEL LOUISE ABBOTT, of the class of 1902.

Applications for the year 1900-1901 should be in the hands of the Dean by the first day of June, 1900.

#### THE SARGENT PRIZE.

This prize was instituted by John Osborne Sargent of the class of 1830, and endowed in his memory by his daughter, Georgiana W. Sargent, in 1892. The prize is of one hundred dollars for the best metrical translation of a lyric poem of Horace.

Undergraduates of Harvard College and of Radcliffe College may compete for this prize. The prize may be withheld if no competitor appears to deserve it.

The versions must be neatly and legibly written upon letter paper, of good quality, of quarto size, with a margin not less than one inch at the top and bottom and on each side; and the sheets must be securely stitched together. They must be deposited with the Dean of Radcliffe College on or before the first day of May, 1898. Each version must have inscribed upon its titlepage an assumed name of the writer, and must be accompanied by a sealed envelope containing the writer's true name and superscribed with the assumed name.

In 1890 the Sargent Prize was awarded to Helen Leah Reed, of the Senior Class.

In 1892 the Sargent Prize was awarded to MARGARET FOSTER HERRICK, a Special Student.

#### THE GEORGE B. SOHIER PRIZE.

Mr. Waldo Higginson, of the Class of 1833 in Harvard College, gave to Harvard College a sum to found a Prize in memory of his brother-in-law George B. Sohier of the Class of 1852, which is to be

known as the George B. Sohier Prize. The endowment is for "one prize of \$250 for the best thesis presented by a successful candidate for Honors in English or Modern Literature. If no thesis is deemed worthy of a prize, no prize will be given." The competitors may be either (1) undergraduates in Harvard College, (2) Harvard graduates who are resident at the University as students in the Graduate School, or (3) students of Radcliffe College.

In 1897 the Sohier Prize was awarded to Beulah Marie Dix, of the class of 1897. Subject: "Published Collections of English and Scottish Ballads, 1765-1802."

#### RADCLIFFE COLLEGE.

#### SEPTEMBER EXAMINATION.

The September Examinations will be held in Cambridge only, on Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, September 17, 18, 19, 20, 21, and 22.

#### ORDER OF EXAMINATIONS. (June and September.)

All candidates must present themselves punctually at 8 A. M. on the day of their first written examination (Monday excepted) and at 8 A. M. on each succeeding day on which they offer a subject in which a laboratory examination is prescribed.

Monday, June 25, and September 17.

10.45 A. M. Candidates offering the subjects of this day meet at 10 Garden Street the officer in charge of the examinations.

11-12. Anatomy, Physiology and Hygiene.

Tuesday, June 26 and September 18.

8.00 A. M. Candidates offering any of the subjects of this day meet at 10 Garden Street the officer in charge of the examinations.

9-11. Advanced German. 3-4. Advanced Physics.

111-121. Chemistry. 4-5. Logarithms and Trigonometry.

12½-1½. Advanced Algebra. 5-6. Analytic Geometry. 2-3. Solid Geometry.

Wednesday, June 27, and September 19.

8.00 A. M. Candidates offering any of the subjects of this day meet at 10 Garden Street the officer in charge of the examinations.

9-10. Physiography. (For English A, see below.)

10-11. Meteorology. Astronomy.

Thursday, June 28, and September 20.

8-9 A. M. Candidates offering any of the subjects of the last three days meet at 10 Garden Street the officer in charge of the examinations.

9-11. Elementary Latin. 3-4. Latin Composition. 114-14. Elementary Greek. 4-6. Advanced Latin. 2-3. Greek Composition.

Friday, June 29, and September 21.

8-9. Elementary Physics.  $11\frac{1}{2}-1$ . Elementary Algebra.  $9\frac{1}{4}-11\frac{1}{4}$ . Geometry.  $1\frac{3}{4}-3\frac{3}{4}$ . English.

94-104. Plane Geometry. 4-6. Advanced Greek.

Saturday, June 30, and September 22.

8-9½. Elementary French. 1¾-3¾. Advanced French. 9¾-11¼. Elementary German. 4-6. Advanced History. 11½-1.

#### Examinations in the Prescribed Studies of the Freshman Year.

In 1900, the examination in English A will be held in accordance with the programme given below. This examination, formerly held in Cambridge only, is now held in June at all the places in which the Harvard College admission examinations are held in 1900.

#### WEDNESDAY, JUNE 27, AND SEPTEMBER 19.

2.45 p.m. Candidates assemble at No. 10 Garden St.

3-6. English A.

The examinations in French A and German A correspond to the admission examinations in Elementary French and German, and will be held on Saturday, June 30, and Saturday, September 22.

Monographs prepared by the students are published and sold by Messrs. Ginn & Company.

Besides the present publication, Radcliffe College issues annually a list of its Courses of Study and an Annual Report. These documents, and also separate pamphlets, published by Harvard University, giving detailed accounts of the work of the principal departments, may be had by addressing

Radcliffe College,
Cambridge, Massachusetts.



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# Radcliffe College

CAMBRIDGE, MASSACHUSETTS

1901

\*\* The legal title of the Corporation (to be used in making gifts and bequests) is "RADCLIFFE COLLEGE." It should be described as established in Cambridge, Massachusetts.

Correspondence should be addressed to RADCLIFFE COLLEGE, Cambridge, Massachusetts.

The College buildings are open to visitors interested in the work of the College, during both vacations and term-time; though students only are admitted to the class-rooms during the hours of lectures.

The Reference Library is in Fay House.

The Laboratories of Chemistry, Physics and Botany are in buildings on the grounds.

The Laboratory of Biology occupies quarters in the Museum of Comparative Zoölogy on Oxford Street, by permission of the Curator.

The Gymnasium is open to all students without charge.

The Dean and the Secretary may be consulted at Fay House during term-time, and special appointments may be made as required.

The Academic year begins on the Thursday following the last Wednesday in September. In 1901 it is September 26. Students report for registration at 9 A.M. of that day.

The summer vacation begins on the last Tuesday in June, and ends on the last Wednesday in September.

The Christmas recess is from Dec. 23, 1901, to Jan. 2, 1902. inclusive.

The Spring recess is from April 13 to April 19, 1902, inclusive.

## Radcliffe College.

RADCLIFFE COLLEGE, the successor of the Society for the Collegiate Instruction of Women, offers systematic collegiate instruction to women under the professors and other teachers of Harvard University. More than a hundred instructors of the University are teachers in Radcliffe College.

Fay House contains the recitation rooms and offices, and a select working library. The College has four laboratories, of Physics, Chemistry, Botany, and Biology. The collections of the Museum of Comparative Zoölogy, the Peabody Museum of American Archaeology, the University Museums of Geology, Botany, and Mineralogy, and the Semitic Museum, are also open to the students; and, by vote of the President and Fellows of Harvard College, the students have the use of the University Library, containing 500,000 volumes. Opportunities for study in the Astronomical Observatory, the Botanic Garden, and the Herbarium are also afforded.

The requirements for admission are identical with those for admission to Harvard College. The courses of instruction given in Radcliffe College correspond to both "undergraduate" and "graduate" courses offered by Harvard University, and are more than sufficient to enable a woman to perform the work required by the University for the degrees of A. B. and A. M. In addition to these, Graduate Students in Radcliffe College have access to a large number of Graduate courses in Harvard University. The examinations are the same in both institutions, and the diplomas conferring the degrees of A. B. and A. M. are countersigned by the President of Harvard University as a guarantee that these degrees are equivalent to the corresponding degrees given by the University.

For provisions for the admission of Graduate Students and Special Students, see pages 42, 43, 44 and 45.



## Associates of Radcliffe College.

ELIZABETH CARY AGASSIZ.

EZRA HENRY BAKER, A. B.

WILLIAM ELWOOD BYERLY, Ph. D.

ARTHUR ASTOR CAREY, A. B.

ANNIE BARBER CLARKE, A. M.

MARY COES, A. M.

MARY HUNTINGTON COOKE.

LILIAN HORSFORD FARLOW.

ARTHUR GILMAN, A.M.

STELLA SCOTT GILMAN.

GEORGE LINCOLN GOODALE, M.D., LL.D.

WILLIAM WATSON GOODWIN, PH. D., LL. D., D.C.L.

JOHN CHIPMAN GRAY, LL. D.

JAMES BRADSTREET GREENOUGH, A. B.

HENRY LEE HIGGINSON, A. M.

AGNES IRWIN, LITT. D.

VIRGINIA NEWHALL JOHNSON, A. B.

ALICE MARY LONGFELLOW.

ELLEN FRANCIS MASON.

JOHN FARWELL MOORS, A. M.

CHARLES ELIOT NORTON, LITT. D., LL. D.

JAMES MILLS PEIRCE, A. M.

CLEMENT LAWRENCE SMITH, A.M., LL. D.

JOSEPH BANGS WARNER, A.M., LL. B.

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President.
ELIZABETH C. AGASSIZ.

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ELIZABETH C. AGASSIZ, Chairman.

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WILLIAM E. BYERLY.

Ex-officio.

LILIAN HORSFORD FARLOW. JOHN CHIPMAN GRAY. JOSEPH B. WARNER, ALICE M. LONGFELLOW. WILLIAM W. GOODWIN. SARAH W. WHITMAN.

CLEMENT L. SMITH.

Academic Board.

WILLIAM E. BYERLY, Chairman.

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MINTON WARREN.
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Hans Carl Günther von Jagemann
Charles Hall Grandgent.
George Lyman Kittredge.

Secretary.
Mary Coes.

Librarian.

CAROLINE A. FARLEY.

Medical Adviser to the College.
HENRY PICKERING WALCOTT, A.B., M.D.

### Standing Committees.

The House Committee in charge of buildings, house-service, grounds, and repairs and additions, Mrs. Whitman, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Mrs. Farlow, Miss Longfellow, Mr. Warner.

The Students' Committee in charge of the general discipline of the students, oversight of their homes while in Cambridge, and of their amusements, clubs, and social life, Miss Longfellow, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Mrs. Cooke, Mrs. Farlow, Miss Coes.

The Library Committee with general supervision of the Library, Mrs. Farlow, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Professor Goodwin, Professor Greenough, Miss Mason.

The Finance Committee in charge of all matters pertaining to Expenditure, Endowment Fund, etc., Professor Gray, Chairman, Mr. Baker, Professor Byerly, Mrs. Farlow, Mr. Gilman, Mr. Higginson, Miss Irwin, Mr. Moors, Mr. Warner.

The Committee on the Gymnasium, Mrs. FARLOW, Chairman, Miss Irwin, Mr. Carey, Mrs. Johnson, Miss Longfellow.

The College keeps a list of those students who have received degrees or certificates and wish to find positions as teachers, for the information of school officers and others who may require their services.



## REQUIREMENTS FOR ADMISSION TO RADCLIFFE COLLEGE.

## ADMISSION OF CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS.

The requirements for admission to Radcliffe College are the same as those for admission to Harvard College. Radcliffe College holds no independent entrance examinations, but is authorized to make arrangements by which women can take the Harvard Examinations and have their work submitted to the Harvard Examiners. These examinations may be taken in Cambridge, and in other places in which the Harvard examinations are held in June. The September examinations are held in Cambridge only.

Two examinations of candidates for admission will be held in Cambridge in 1901, in Fay House. The days and hours are given in detail on the third page of the cover of this pamphlet.

The academic year begins on Thursday, September 26, 1901. All students register at the Office on that day at nine A. M.

Any one expecting to take admission examinations should register for such examinations on a form which may be obtained from the Secretary. When writing for this form she should say whether she is a Preliminary or a Final Candidate. The Registration Blanks of all candidates who wish to take examinations in June should be properly filled out and in the hands of the Secretary by June 10; those of candidates who wish to take examinations in September, by September 10.

Every candidate for admission to Radcliffe College is required to furnish a testimonial of honorable dismissal from the school or college which she has attended, or from the tutor with whom she has studied. She must also refer to two persons from whom information about her may be obtained. References should be sent to the Secretary of the college a month before the examination.

A fee of five dollars for the whole examination is to be paid by each candidate in June, and again in September if she then presents herself. For this a receipt will be given and the amount will be deducted from the first payment for tuition. The fee will not be returned to a candidate who does not enter college.

#### OLD AND NEW METHOD.

The system of requirements for admission to Radcliffe College heretofore in operation will be continued until 1901. A new system, adopted in May, 1899, went into full operation in 1900 (see p. 16). A candidate for admission to the College in 1901 may be admitted by either method.

#### I. OLD METHOD.

In 1901, but not thereafter, candidates for admission to Radcliffe College may be examined in the studies included in the following list and in accordance with the requirements in each study therein defined. The terms on which candidates examined by this method will be admitted are stated as follows:

A candidate may satisfy the requirements for admission to the Freshman Class by passing examinations in —

- (a) All the elementary studies, and at least two advanced studies.
- (b) All the elementary studies except either German or French, and at least three advanced studies.
- (c) All the elementary studies, except either Greek or Latin, and at least FOUR advanced studies, including 6 and either 7 or 8 or 9.
- (d) All the elementary studies except either Greek or Latin and either German or French, and at least FIVE advanced studies, including 6 and either 7 or 8 or 9.

A candidate may be admitted in spite of deficiencies in some of the studies required; but such deficiencies must be made up during her course.

The examinations in the elementary studies will count as one hour each with the exception of those in English, Greek, and Latin, which will count as two hours each. A candidate who prefers in any study to take the paper set under the new method will be allowed to do so.

For regulations relating to the division of the examination, see pp. 38 and 39.

A candidate who has a Preliminary Certificate for examination under the old method may, if she so wishes, take Final Examinations under the new method.

#### STUDIES IN WHICH EXAMINATIONS ARE HELD.

The examinations for admission embrace two classes of studies, Elementary and Advanced.

The Elementary Studies are not treated as equivalent. The Advanced Studies are regarded as occupying equal amounts of time in school, and are of equal importance in the examinations.

#### ELEMENTARY STUDIES.

- I. English.—The examination in English will occupy two hours, and will consist of two parts, which, however, cannot be taken separately:—
- I. The candidate will be required to write a paragraph or two on each of several topics chosen by her from a considerable number perhaps ten or fifteen set before her on the examination paper. In 1901 the topics will be drawn from the following works:—

Shakspere's Merchant of Venice; Pope's Iliad, Books I, VI, XXII, XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Cooper's Last of the Mohicans; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

The candidate is expected to read intelligently all the books prescribed. She should read them as she reads other books; she is expected, not to know them minutely, but to have freshly in mind their most important parts. In every case, the examiner will regard knowledge of the book as less important than ability to write English.

As additional evidence of preparation, the candidate may present an exercise book, properly certified by her instructor, containing compositions or other written work.

II. A certain number of books are prescribed for careful study. This part of the examination will be upon subject-matter, literary form, and logical structure, and will also test the candidate's ability to express her knowledge with clearness and accuracy.

The books prescribed for this part of the examination are:

In 1901: Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

No candidate will be accepted in English whose work is seriously defective in point of spelling, punctuation, grammar, or division into paragraphs.

In connection with the reading and study of the prescribed books, parallel or subsidiary reading should be encouraged and a considerable amount of English poetry should be committed to memory. The essentials of English grammar should not be neglected in preparatory study.

The English written by a candidate in any of her examination-books may be regarded as part of her examination in English, in case the evidence afforded by the examination book in English is insufficient. A candidate who has passed the examination in Elementary English with a grade of A or B may take a second examination, which, if passed with a grade of A or B, shall exempt her from the prescription of English A (prescribed Freshman English).

At this examination, which will be held in September only, a candidate will write one or more compositions on topics to be selected by her from a list comprising subjects in English Literature, the Classics, French and German authors, History, and Science. The examination will occupy two hours.

The attention of candidates who have passed in English at the Preliminary Examination is called to another method of anticipating English A (see p. 40). Their attention is called also to the "new plan for an admission examination in English" on page 19.

- 2. Greek. The translation at sight of simple Attic Prose (with questions on the usual forms and ordinary constructions of the language).
- 3. Latin. The translation at sight of simple prose (with questions as in Greek).

The passages set for translation must be rendered into simple and idiomatic English. Teachers are requested to insist on the use of good English as an essential part of the candidate's training in translation.

In Latin the following pronunciation; is recommended: —  $\bar{a}$  as in father,  $\check{a}$  the same sound but shorter;  $\bar{e}$  like  $\hat{e}$  in fête,  $\check{e}$  as in set;  $\bar{\imath}$  as in machine,  $\check{\imath}$  as in sit;  $\bar{\imath}$  as in hole,  $\check{\imath}$  as in nor;  $\bar{u}$  as in rude,  $\check{u}$  as in put; j like y in year, e and g like Greek e and g.

Instructors are requested to teach their pupils in pronouncing Greek to use the *Greek accents*, and to give (for example) a the sound of a in father, a that of a in father a that a is the father a that a in father a that a is the father a that a is the father a in father a that a is the father a in f

It is further recommended that pupils be accustomed, from the beginning of the preparatory course in Greek and Latin, to translate into those languages, both orally and in writing, passages prepared by the teacher on the basis of the prose authors read.

- 4. German. The translation at sight of simple prose.
- 5. French. The translation at sight of ordinary prose.

The passages set for translation in 4 and 5 will be similar to those set at the final examinations in German A and French A respectively,—College courses, each having three hours of instruction a week through the year. The passages set for translation must be rendered into simple and idiomatic English. A knowledge of the language itself, rather than of the grammar, is expected; but proficiency in elementary grammar or facility in writing the language will be accepted as an offset for some deficiency in translation. It is recommended that from the outset attention be given to pronunciation. Wherever possible, care should be taken, during the whole course of preparation, to accustom the pupil to hear and understand spoken German and French.

6. History (including Historical Geography). — Either (1) History of Greece and Rome; or (2) History of the United States and of England.

The following works will serve to indicate the amount of knowledge demanded in History: Oman's History of Greece; Allen's History of the Roman people (the whole), or Leighton's History of Rome (to the death of Commodus); Higginson's Young Folks' History of the United States (to the end of Chapter XXI.) and Johnston's History of the United States for Schools (beginning at § 269); Guest and Underwood's Handbook of English History (to the year 1793), or Gardiner's Student's History of England through Part IX.

The following selections are recommended for additional reading and will be made the basis of optional questions in the examinations \*:—

For Greek History: Curtius's History of Greece, Book I. Ch. I., Book II. Ch. IV., and Book III. Ch. III.

For Roman History: Beesly's The Gracchi, Marius, and Sulla; Tighe's Development of the Roman Constitution.

For American History: Lodge's English Colonies, Chapters II. and XXII.; Morse's John Quincy Adams, Chapters II. and III.; Josiah Quincy's Figures of the Past.

For English History: Macaulay's History of England, Chapters I. and III.

7. Mathematics.—(a) Algebra, through Quadratic Equations. (b) Plane Geometry.

The requirement in Algebra embraces the following subjects: factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem for positive integral exponents and the extraction of roots; putting questions into equations, and the reduction of equations; the ordinary methods of elimination, and the solution of both numerical and literal equations of the first and second degrees, with one or more unknown quantities, and of problems leading to such equations.

8. Physical Science. — Either (1) Astronomy (Young's Lessons in Astronomy, Ginn & Co., omitting the appendix) and Physics (Avery's Elements of Natural Philosophy,† or Gage's Elements of Physics); or (2) a course of experiments not less than forty in number performed at school by the pupil. These must be selected from a list issued by the University under the title A Descriptive List of Elementary Exercises in Physics, or must be approved by the Department of Physics as the equivalent of those contained in this list.

<sup>\*</sup>Candidates who take the questions on the Selections will be allowed to omit some of the questions on the corresponding Manual.

<sup>†</sup> The following portions of the 1885 edition may be omitted: sections I. and II. of chap. I (excepting arts. 23-30), arts. 254-267, 346-349, 371, 411-415, 445-455, 464-467, 470-476, 707-714, 729-745 and the whole Appendix.

All teachers who can command the necessary apparatus are requested to present their pupils in (2) rather than in (1). (For the character of the examination in (2) see the note under Advanced Studies 8 and 9.)

#### ADVANCED STUDIES.

The half-courses designated by the letters (a) and (b) in the studies numbered 3, 6, and 7 may be combined at the option of the candidate; and any two of them will be accepted (subject to the conditions stated on page 8, paragraphs c and d) as the equivalent of one whole study.

- 1. Greek.—The translation at sight of average passages from Homer or the translation at sight of less difficult passages from both Homer and Herodotus (with questions on the usual forms and ordinary constructions of the language and on prosody).
- 2. Latin.—The translation at sight of average passages from Cicero and Virgil (with questions as in Greek).
- 3. Greek and Latin Composition.—(a) The translation into Attic prose of a passage of connected narrative. (b) The translation into Latin of a similar passage.

In preparing for this subject, it is strongly urged that from an early stage pupils be accustomed to translate into Greek and Latin not merely detached sentences illustrative of constructions, but also passages of connected narrative prepared by the teacher on the basis of the prose authors read. The passages set at the examination will be of this character. Examples of the kind of exercise recommended may be found in the following books: The Beginner's Greek Composition, by Collar and Daniell (Boston: Ginn & Co.); Allinson's Greek Prose Composition (Boston: Allyn & Bacon); Woodruff's Exercises in Greek Prose Composition (Boston: Leach, Shewell, & Sanborn); Collar's Practical Latin Composition (Boston: Ginn & Co.); Daniell's Exercises in Latin Composition (Boston: Leach, Shewell, & Sanborn).

- 4. German.—Translation at sight of modern German prose.—Grammar.—Composition based upon the following books: Riehl (Der Fluch der Schönheit).—Freytag (Aus dem Staat Friedrichs des Grossen).—Heine (Die Harzreise).—Goethe (the first three books of Dichtung und Wahrheit).—Lessing (Minna von Barnhelm).—Schiller (Wilhelm Tell and Das Lied von der Glocke).—Thirty pages of lyrics and ballads.
- 5. French.—Translation at sight of standard French prose.—Grammar.—Composition based upon the following books: Daudet (La Dernière

Classe—Le Siège de Berlin).—Mérimée (Colomba).—Sandeau (Mlle. de la Seiglière, the play).—Corneille, Racine, Molière (one play by each author).

In advanced German and French, translation at sight will form an important part of the examination. Candidates will be expected to be familiar with the subject-matter as well as the language of the prescribed books. Some of the books may be changed from time to time, but with not less than two years' notice. The passages set for translation into German or French will be suited to the proficiency of those who have begun to study the language in College and have had instruction in it three hours a week for two years.

- 6. Mathematics.—(a) Logarithms; \* Plane Trigonometry, with its applications to Surveying and Navigation. (b) Solid Geometry (or the Elements of Analytic Geometry, if not offered in 7).
- 7. Mathematics (a) The elements of Analytic Geometry (or Solid Geometry if not offered in 6). (b) Advanced Algebra.

The following books will serve to indicate the nature and amount of the requirements in Logarithms and Trigonometry, Solid Geometry, Analytic Geometry, and Advanced Algebra.

Logarithms and Trigonometry. Wheeler's Logarithms (Cambridge: Sever) or the unbracketed portions of Peirce's Elements of Logarithms (Boston: Ginn & Co.). Wheeler's Plane Trigonometry (same publishers). Problems in Plane Trigonometry (Cambridge: Sever). Peirce's Mathematical Tables, chiefly to four places (Boston: Ginn & Co.). \*

Solid Geometry. Chauvenet's Geometry, Revised and Abridged (Philadelphia: J. B. Lippincott & Co.), Books VI., VII., VIII., and IX. Analytic Geometry. Briggs's Analytic Geometry (New York: Wiley & Co.).

Advanced Algebra. Wentworth's College Algebra (Boston: Ginn & Co.), to article 496, omitting in Chapter XV., to § 207, Chapters XVII., XIX., XX., in Chapter XXII., §§ 310-314, in Chapter XXII., §§ 321-331, Chapters XXV., XXVII., XXVII., in Chapter XXIX., §§ 452-463, also § 476.

<sup>\*</sup> Candidates are required to use at the examinations the four-place tables provided by the University. Teachers unfamiliar with these tables who wish to see them before the examinations should write to the Secretary of Radcliffe College.

- 8. Physical Science. Physics. A course of at least sixty experiments in addition to those of Elementary Physics (2), selected from the same or similar manuals, and covering the same subjects, but demanding more skill and more knowledge of physical theories and laws.
- 9. Physical Science. Chemistry. A course of at least sixty experiments in General Chemistry actually performed at school by the pupil.

In Elementary Physics (2), in Advanced Physics, and in Chemistry, the candidate will be required to pass both a written and a laboratory examination. The written examination will test her knowledge of experiments and experimenting as well as her knowledge of principles and results. The laboratory examination will test her skill in experimenting. The candidate will be required to hand in the original note-book in which she recorded the steps and the results of the experiments which she performed at school; and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. The note-book in Physics should contain an index of the exercises which it describes.

A candidate who offers elementary or Advanced Physics or Chemistry will hand in her laboratory note-book at the hour of the laboratory examination. Laboratory note-books will be deposited, after examination, in the Secretary's office, where they will be kept for a reasonable time, subject to the order of the owners.

A candidate examined in June at any place where a laboratory examination is not provided will be required to take such an examination in Cambridge in the autumn; but if she passes the written examination in June and presents a satisfactory note-book, the subject will be temporarily counted in her favor in determining the question of her admission to College. Similarly a Preliminary candidate is allowed to postpone her laboratory examination, until September of the year in which she enters College.

Most pupils need lectures or other oral explanations in addition to the descriptions given in the laboratory manuals. When it is impossible to provide lectures, two text-books treating the subject from different points of view are advantageous.

Descriptive lists of experiments which will meet the requirements in Physics and Chemistry may be procured (at 40 cents each) of the Harvard Coöperative Society, or of Charles W. Sever, Bookseller, Harvard Square, Cambridge.

#### II. NEW METHOD.

After 1901 this will be the only method of admission to Radcliffe College.

The studies which may be presented in satisfaction of the requirements for admission to the Freshman Class in Radcliffe College are named together in the following lists. The figure attached to each study indicates the relative weight which will be given to that study in determining the question of the candidate's fitness for admission:

Elementary	Advanced
English (4)	
Greek (4)	Greek (2)
Latin (4)	Latin (2)
German (2)	German (2)
French (2)	French (2)
	One of the following four:
Ancient History (2)	Ancient History (2)
or	English and American
English and American	History (2)
History (2)	History of Europe (2)
• • •	History of a period (2)
Algebra (2)	Algebra (1)
Geometry (3)	Logarithms and Trigo-
or	nometry (1)
Plane Geometry (2)	Astronomy (1)
Physics (2)	Physics (2)
Chemistry (2)	Meteorology (1)
Physiography (1)	
Anatomy, etc (1)	

A candidate for admission must offer from this list studies amounting to 26 points, of which points at least four must be in advanced studies. The studies offered must include:—

English	4		
One ancient language (Elem. Latin or Elem.			
Greek)	4		
One modern foreign language (Elem. German			
or Elem. French)	2		
Elementary History	2		
Algebra	2		
Geometry or Plane Geometry	3 or 2		
Studies amounting to two points from the fol-			
lowing sciences (Elem. Physics, Chemistry,			
Physiography, Anatomy, etc., Astronomy)	2		
	19 or 18		

No candidate may offer an advanced study who does not at the same time or earlier offer the corresponding Elementary study; but Physics is considered Elementary with respect to Meteorology, and Geometry or Plane Geometry, with respect to Astronomy.

Candidates who are looking forward to the extended study of English or of any other modern literature are advised to acquire a knowledge of Greek as well as of Latin.

#### NEW DEFINITIONS OF REQUIREMENTS.

#### GOOD ENGLISH.

Clear and idiomatic English is expected in all examination papers and note-books written by candidates for admission. Teachers are requested to insist on good English, not only in translations, but in every exercise in which the pupil has occasion to write or to speak English.

#### r. English.

A candidate for admission to Radcliffe College may take either (a) the examination in Elementary English, as heretofore, or (b) the examination described below, which, besides satisfying the requirement in Elementary English, will exempt her from the prescribed English of the first year (English A); provided, however, that if she passes with Grade D she will be required to take before the end of her second year a half-course in English Composition in addition to her regular elective courses.

#### (a) Elementary English.

The examination in English will consist of two parts, which, however, cannot be taken separately:—

I. The candidate will be required to write a paragraph or two on each of several topics chosen by her from a considerable number—perhaps ten or fifteen—set before her on the examination paper. In 1901 and 1902 the topics will be drawn from the following works:—

Shakspere's Merchant of Venice; Pope's Iliad, Books I, VI, XXII, XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Cooper's Last of the Mohicans; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

The candidate is expected to read intelligently all the books prescribed. She should read them as she reads other books; she is expected, not to know them minutely, but to have freshly in mind their most important parts. In every case the examiner will regard knowledge of the book as less important than ability to write English.

As additional evidence of preparation, the candidate may present an exercise-book, properly certified by her instructor, containing compositions or other written work.

II. A certain number of books will be prescribed for careful study. This part of the examination will be upon subject-matter, literary form, and logical structure, and will also test the candidate's ability to express her knowledge with clearness and accuracy.

The books prescribed for this part of the examination in 1901 and 1902 are:—

Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

No candidate will be accepted in English whose work is seriously defective in point of spelling, punctuation, grammar, or division into paragraphs.

In connection with the reading and study of the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry should be committed to memory. The essentials of English grammar should not be neglected in preparatory study.

The English written by a candidate in any of her examination-books may be regarded as part of her examination in English, in case the evidence afforded by the examination-book in English is insufficient. A candidate who has passed the examination in Elementary English with a grade of A or B may take a second examination, which, if passed with a grade of A or B, shall exempt her from the prescription of English A (prescribed Freshman English).

At this second examination, which will be held in September only, a candidate will write one or more compositions on topics to be selected by her from a list comprising subjects in English Literature, the Classics, French and German authors, History and Science. The examination will occupy two hours.

#### (b) English.

The examination will consist of questions in Rhetoric,\* questions in Literary History from the time of Shakspere, and compositions - based on the following works :-

Palgrave:

Golden Treasury (First Series)

Shakspere:

Julius Caesar

The Merchant of Venice

Macbeth

Twelfth Night or As You Like

It

King Lear or Hamlet

Milton:

L'Allegro

Il Penseroso

Comus

Bunyan:

The Pilgrim's Progress, or

Defoe:

Robinson Crusoe

Dryden:

Alexander's Feast

To the Memory of Mr. Oldham

Upon the Death of the Earl of Dundee

Swift:

The Voyage to Lilliput

Addison and Steele:

The Sir Roger de Coverley Papers

Pope:

Epistle to Arbuthnot

Goldsmith:

The Vicar of Wakefield

The Deserted Village

Scott:

The Lady of the Lake

<sup>\*</sup>A. S. Hill's Principles of Rhetoric is used for the corresponding Study in Radcliffe College, and is recommended for use in preparation for this examination.

Ivanhoe

Quentin Durward

Macaulay:

Life of Johnson

Lays of Ancient Rome

Byron:

Mazeppa

The Prisoner of Chillon

Irving:

The Legend of Sleepy Hollow

Rip Van Winkle

Tales of a Traveller

Thackeray:

Henry Esmond

Dickens:

A Tale of Two Cities, or

David Copperfield

Browning: Selections, for example,

Cavalier Tunes
The Lost Leader

How They Brought the Good

News from Ghent to Aix

Evelyn Hope

Home Thoughts, from Abroad

Home Thoughts, from the Sea Incident of the French

Camp

The Boy and the Angel

One Word More

Hervé Riel

Pheidippides

Tennyson: Selections, for example,

Enid

Elaine

The Passing of Arthur

The Lady of Shalott

The Lotus Eaters

Ulysses

Tithonus

The Revenge

Franklin:

Autobiography

Hawthorne:

The House of the Seven Gables

Longfellow:

Tales of a Wayside Inn

Lowell:

The Vision of Sir Launfal

The candidate is expected to read all the books prescribed.\* She should read them as she reads other books, not trying to remember them in detail, but regarding each work as a whole and giving it such appreciation as shall enable her to write about it intelligently. In every case the examiner will regard knowledge of the books as less important than ability to write English; if the examination book in English affords insufficient evidence, he will examine the written work of the candidate in other subjects.

No candidate will be accepted in English whose work is seriously faulty in spelling, grammar, punctuation, or division into paragraphs.

Preparation for the examination should occupy at least three school hours, or periods, a week for four years. Throughout the course fre-

<sup>\*</sup> In connection with the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry committed to memory.

quent short compositions should be required as well as occasional long ones. Topics should be chosen by the pupil herself whenever that is possible; and the topics assigned by the instructor should be within the range of the pupil's knowledge and sympathies, and should be such as to awaken interest and stimulate intelligence. Criticism should be constant and thorough; it should take account of merits as well as of faults, and should never interfere with the honest expression of opinion or with the free play of individuality in thought and expression. Mechanical methods of every kind should be avoided; and attention should be fixed on principles rather than rules.

As to the right way of studying Rhetoric, attention is called to the following extract from the Report of the Vassar Conference:\*

"Though it is clear that the power to write a language can be obtained only by unremitting practice, yet, in the opinion of the Conference, such practice may properly be accompanied and illustrated by a course in elementary rhetoric. This course should include not only the principles of clearness, force, and good taste, but the principles of the arrangement of clauses in the sentence and of sentences in the paragraph. The teacher should bear in mind that any body of written English, of whatever length, is an organic unit, with principles that apply as well to the arrangement of the minor elements as to the grouping of the larger divisions of essay or book. Especial care should be taken that rhetoric is not studied by itself or for its own sake. Its connection with the pupil's actual written or spoken exercises should be kept constantly in view."

In 1901 the examination will be held on Wednesday, June 26th, at all the places where other examinations for admission are held and on Wednesday, September 18th, at Cambridge only. It will occupy three hours, beginning at 3.30 P. M.

A candidate who does not offer herself for examination according to the foregoing plan may prepare herself according to the plan set forth on pages 9 and 10. If she passes the examination according to this latter plan, she is not thereby exempted from the prescribed English of the Freshman year; but if she passes it with a grade of A or B, she is entitled to another examination (in September); and if she passes this second examination with a grade of A or B, she is exempted from prescribed English.

After 1903 the examination for the anticipation of English A (p. 40) will be withdrawn.

<sup>\*</sup>Report of the Committee of Ten, page 95, section 8.

#### 2, 3. Greek.

#### 2. Elementary Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least two school years. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of simple Attic prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) A thorough examination on a prescribed portion of Xenophon (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Attic prose, involving the use of such words, constructions, and idioms only as occur in the portion of Xenophon prescribed.

The portion of Xenophon prescribed for this examination is the second book of the Anabasis. Two year's notice will be given of any change in the selection.

#### 3. Advanced Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least *three* school years. The second part of the examination (Greek Composition) is optional, and may be omitted without loss of credit:—

- (a) The translation at sight of Attic prose and of Homer, with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into Attic prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Greek prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

<sup>\*</sup>The pages of the more recent Teubner text editions are taken as a standard in this statement.

The estimate of the periods of study necessary to prepare for the elementary and advanced examinations in Greek is based on the assumption that the candidate has begun the study of Latin at least a year earlier, and has continued it along with her Greek course; otherwise the periods specified would not be sufficient.

In preparation for the elementary examination in Greek, candidates should read from 130 to 170 pages\* of Attic prose. For the advanced examination candidates should read from 30 to 50 pages more of Attic prose, and from 3000 to 5000 verses of Homer. The reading of Homer may be advantageously begun with a thorough study of Iliad, Books I and II (to the catalogue of ships).

The pupil should be constantly guided in proper methods of reading, and trained to read the Greek intelligently, as Greek, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Greek, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Greek Composition, pupils should be trained, from an early stage of the preparatory course, to render into Greek, not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

#### 4, 5. Latin.

#### 4. Elementary Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *three* school years. The two parts of the examination cannot be taken separately:—

(a) The translation at sight of simple Latin prose and verse. (The passages set for translation must be rendered into simple and idiomatic English.)

<sup>\*</sup> See footnote, p. 22.

(b) A thorough examination on a prescribed portion of Cicero's speeches (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose, involving the use of such words, constructions, and idioms only as occur in the speeches prescribed.

The portion of Cicero prescribed for this examination is the second, third, and fourth speeches against Catiline. Two years' notice will be given of any change in the selection.

#### 5. Advanced Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *four* school years. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of Latin prose and verse with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into Latin prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the examinations in Latin is made with reference to schools which have a four years' course. Schools which have a five years' course may more advantageously provide for beginning the study of Latin in the first year, with some diminution, if necessary, of the time devoted to it in the last years of the course.

The course of reading pursued in preparation for the examinations in Latin should include:—

- (a) Easy reading, included in or following a suitable introductory book ('Latin Lessons'), amounting to from 30 to 40 pages;\*
  - (b) Nepos (Lives) and Caesar (Gallic War), 90 to 120 pages;

<sup>\*</sup> See footnote, p. 22.

- (c) Cicero, 90 to 120 pages, including the four speeches against Catiline and the speech on the Manilian Law, with additional speeches selected by the teacher;
  - (d) Virgil and Ovid, 6000 to 10,000 verses, including the first six books f the Aeneid.

Preparation for the elementary examination alone should include (a) and (b), the four speeches against Catiline, and from 2000 to 3000 verses of Virgil, or of Ovid and Virgil.

The pupil should be constantly guided in proper methods of reading, and trained to read the Latin intelligently, as Latin, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Latin, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Latin Composition, pupils should be trained, from an early stage of the preparatory course, to render into Latin not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

#### 6, 7. German.

#### 6. Elementary German.

- (a) The translation at sight of simple German prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of simple English sentences, or of easy connected prose, to test the candidate's familiarity with elementary grammar.

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than two hundred pages of easy German (including reading at sight in class).

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugation of the weak and the more usual strong verbs; the declension of articles, adjectives, pronouns, and such nouns as are readily classi-

fied; the commoner prepositions; the simpler uses of the modal auxiliaries; the elements of syntax, especially the rules governing the order of words.

Pronunciation should be carefully taught, and the pupils should have frequent opportunities to hear German spoken or read aloud. The writing of German from dictation is recommended as a useful exercise.

#### 7. Advanced German.

- (a) The translation at sight of ordinary German. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of those who have read, in addition to the amount specified under Elementary German, not less than five hundred pages of classical and contemporary prose and verse. It is recommended that the reading be selected from such works as the following: Riehl, Culturgeschichtliche Novellen; Freytag, Bilder aus der deutschen Vergangenheit, Die Journalisten; Kohlrausch, Das Jahr 1813; Schiller, Der dreissigjährige Krieg, Wilhelm Tell, Maria Stuart, Die Jungfrau von Orleans; Goethe, Hermann und Dorothea, Egmont, Iphigenie; Lessing, Minna von Barnhelm. About one half of the amount read should be Nineteenth Century prose.

In the translation into German candidates will be expected to show a thorough knowledge of accidence, the elements of word-formation, the principal uses of prepositions and conjunctions, and the essentials of syntax, especially the uses of the modal auxiliaries, and of the subjunctive and infinitive modes.

It is recommended that the candidate be trained to follow a recitation conducted in German and to answer in that language questions asked by the instructor.

#### 8, 9. French.

#### 8. Elementary French.

- (a) The translation at sight of ordinary Nineteenth Century prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of simple English sentences or of easy connected prose, to test the candidate's familiarity with elementary gram-

mar. Proficiency in grammar may also be tested by direct questions, based on the passages set for translation under (a).

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than four hundred pages (including reading at sight in class) from the works of at least three different authors. It is desirable that a portion of the reading should be from works other than works of fiction.

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugations of regular verbs, of the more frequent irregular verbs, such as aller, envoyer, tenir, pouvoir, voir, vouloir, dire, savoir, faire, and those belonging to the classes represented by ouvrir, dormir, connaître, conduire, and craindre; the forms and positions of personal pronouns and of possessive, demonstrative, and interrogative adjectives; the inflection of nouns and adjectives for gender and number, except rare cases; the uses of articles, and the partitive constructions.

Pronunciation should be carefully taught, and pupils should have frequent opportunities to hear French spoken or read aloud. The writing of French from dictation is recommended as a useful exercise.

#### 9. Advanced French.

- (a) The translation at sight of standard French. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of candidates who have read, in addition to the amount specified under Elementary French, not less than six hundred pages of prose and verse from the writings of at least four standard authors. A considerable part of the amount read should be carefully translated into idiomatic English.

Candidates will be expected to show a thorough knowledge of accidence and familiarity with the essentials of French syntax, especially the uses of tenses, modes, prepositions, and conjunctions.

It is recommended that the candidate be trained to follow a recitation conducted in French and to answer in that language questions asked by the instructor.

#### 10, 11. History (including Historical Geography).

#### 10. Elementary History.

Either of the two following groups, each including two fields of historical study: —

- 1. Greek and Roman History.— (a) Greek History to the death of Alexander, with due reference to Greek life, literature, and art. (b)Roman History to the accession of Commodus, with due reference to literature and government.
- 2. English and American History. (a) English History, with due reference to social and political development. (b) American History, with the elements of Civil Government.

For preparation in each of the two historical fields presented, a course of study equivalent to at least three lessons a week for one year will be necessary.

The candidate will be expected to show on examination such general knowledge of each field as may be acquired from the study of an accurate text-book of not less than 300 pages, supplemented by suitable parallel readings amounting to not less than 500 pages. The examination will call for comparison of historical characters, periods, and events, and in general for the exercise of judgment as well as of memory. Geographical knowledge will be tested by means of an outline map.

In the judgment of the Department of History it is desirable that Greek and Roman History be offered as a part of the preparation of every candidate.

#### 11. Advanced History.

Any one of the four courses of study which follow: -

- 1. Greek History to the destruction of Corinth and Roman History to the death of Constantine (open to those candidates only who have offered English and American History as an elementary study).
- 2. English History and American History (open to those candidates only who have offered Greek and Roman History as an elementary study).
- 3. European History from the Germanic conquests to the beginning of the Seventeenth Century.

4. A year's study of any one of the four historical fields defined under Elementary History and not already offered by the candidate, together with a year's detailed study of a limited period \* within that field, selected with the approval of the Department of History.

The examination in the second part of 4 will be specially adapted to the particular period selected and will be held in Cambridge only.

In every case the candidate will be expected to show on examination such an acquaintance with the whole field as may be gained from the study of good text-books, together with substantial parallel readings, and, further, such a detailed knowledge of some part of the field as may be gained from suitable topical study. A higher standard of acquirement and of power to combine results will be expected than in the elementary requirement.

As further evidence of the candidate's proficiency satisfactory written work, done at school and certified by the teacher, must be submitted at the time of the examination. It must be presented in the form of a notebook (or bound collection of notes), containing not less than 50 written pages on each historical field offered, and must show practice in some of the following exercises:—

- (a) Notes and digests of the pupil's reading outside of the text-books.
- (b) Brief written tests requiring the application to new questions of knowledge previously acquired.
  - (c) Parallels between historical characters or periods.
- (d) Short studies of topics limited in scope, prepared outside of the class-room and illustrated by some reference to contemporary material.
- (e) Historical maps or charts showing explorations, migrations, conquests, territorial changes, or social conditions.

#### 12-15. Mathematics.

A thorough practical acquaintance with ordinary Arithmetic is assumed as underlying all preparation in Mathematics. Knowledge of the fundamental principles of Arithmetic and careful training in accurate computation with whole numbers and with vulgar and decimal fractions form an essential part of early school work. But the pupil's time should not be wasted in the solution by arithmetic of puzzling problems which properly

<sup>\*</sup>For example, the Spartan and Theban supremacies, the period of the Punic wars, the Stuart Period, the transition from the American colonial to the federal system.

belong to algebra, or in complicated and useless reductions, or in the details of commercial arithmetic. It is desirable that some familiarity with algebraic expressions and symbols, including the methods of solving simple equations, be acquired in connection with the course in Arithmetic.

#### Elementary Mathematics.

12. Elementary Algebra.—Algebra, through Quadratic Equations. (As heretofore.)

The requirement in Algebra includes the following subjects: factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem for positive integral powers of the binomial, and the extraction of roots; putting questions into equations and the reduction of equations; the ordinary methods of elimination and the solution of both numerical and literal equations of the first and second degrees with one or more unknown quantities and of problems leading to such equations.

The student should cover carefully the whole ground here specified, and should acquire a thorough understanding not only of the practice, but of the reasons involved in the elementary algebraic rules; for example, in the rules of multiplication, of signs, and of exponents, in the rules for fractions, and in those relating to the reduction and solution of equations. She should train herself to practical skill by the solution of a large number of examples, and should learn to do her work with reasonable quickness, as well as with confidence, accuracy, and clearness. The solution of fairly complicated literal quadratics, the various methods of elimination for equations of the first two degrees, the putting of problems in a neat manner into equations, and the working of the various algebraic operations both for integral and fractional expressions may be mentioned as important subjects of attention. The student should be taught to arrange her work in a clear, orderly, and compact fashion.

The time supposed to be devoted to the systematic study of the requirement in Algebra is the equivalent of a course of three lessons a week through two school years.

13. Geometry.— Plane and Solid Geometry, including problems in mensuration of plane and solid figures, and original propositions in Plane Geometry.

Geometric education should begin in the kindergarten or primary school, where the child should acquire familiarity through the senses with simple geometric forms, by inspecting, drawing, modelling, and measuring them, and noting their more obvious relations. This study should be followed, in the grammar school, by systematic instruction in Concrete (or Observational) Geometry, of which geometric drawing should form a part. Such instruction should include the main facts of Plane and Solid Geometry, treated as matters of observation, and not as exercises in logical deduction, without however necessarily excluding the beginnings of deductive proof as soon as the pupil is ready for them. Concrete Geometry is believed to have important educational value, and to prepare an excellent foundation for the later study of Formal Geometry. It belongs, however, to the earlier stages of school work, and should not be postponed until the time that belongs to direct preparation for college or the scientific school.

In teaching Formal Geometry, stress should be laid from the outset on accuracy of statement and elegance of form, as well as on clear and strict reasoning. As soon as the pupil has begun to acquire the art of rigorous demonstration, her work should cease to be merely receptive, she should be trained to devise constructions and demonstrations for herself, and this training should be carried through the whole of the work in Plane Geometry. Teachers are advised, in their selection of a text-book, to choose one having a clear tendency to call out the pupil's own powers of thought, prevent the formation of mechanical habits of study, and encourage the concentration of mind which it is a part of the discipline of mathematical study to foster. The subject of Geometry, not a particular treatise, is what the pupil should be set to learn; and its simpler methods and conceptions should be made a part of her habitual and instinctive thought. Lastly, the pupil should be stimulated to good work by interest in the study felt and exhibited by the teacher.

The requirement in Geometry embraces the following topics: the general properties of plane rectilinear figures; the circle and the measure of angles; similar polygons; areas; regular polygons, and the measure of the circle; the relations of planes and lines in space; the properties and measure of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle. The propositions required under these several heads are those only which are contained in the older treatises, and which are recognized as constituting the Elements of Geometry. The examination does not include the additions introduced into some recent text-books,

although most of those additions are in themselves valuable for the student who has time and taste for extra study in this field. A syllabus of the required propositions has been prepared. [This syllabus may be obtained, price 10 cents, at the Publication Office, 2 University Hall, Cambridge.]

The examination in Geometry also includes original propositions in Plane Geometry, based on the propositions named in the syllabus, and problems in mensuration in both Plane and Solid Geometry; but excellence in bookwork and in exercises immediately illustrating bookwork will be allowed to offset in part any lack of skill in original work.

The time which it is recommended to assign to the systematic study of the requirement in Formal Geometry is the equivalent of a course of five lessons a week for one school year; but it is believed to be advisable to extend this allowance of time over two years.

- 13a. Plane Geometry. (As heretofore.)
- 13b. Solid Geometry. (As heretofore.)

#### Advanced Mathematics.

14. Logarithms and Trigonometry.—The theory of logarithms and the use of logarithmic tables.—Plane trigonometry.—The solution of the right spherical triangle.—Applications to simple problems.

No technical knowledge of the subjects of surveying and navigation, such, for instance, as the methods of parallel or middle latitude sailing, will be required, but such terms as latitude, longitude, angle of elevation or depression, bearing, etc., should be understood. At the examination, candidates are furnished with four-place tables belonging to the University, and are not allowed to use their own tables. The tables provided are distributed before the hour of examination, so that candidates may have at least an hour for becoming acquainted with their arrangement and use. Teachers who wish a still earlier opportunity of seeing these tables should write to the Secretary of Radcliffe College.

#### 15. Advanced Algebra. (Substantially as heretofore.)

The requirement in Advanced Algebra includes the following subects:

- (a) Simultaneous quadratics and equations solved like quadratics; properties of quadratic equations; addition, subtraction, multiplication and division of complex quantities; inequalities; variations; arithmetical and geometrical progressions; mathematical induction; simple problems in choice and chance; continued fractions; scales of notation.
- (b) Determinants, not including the multiplication theorem; simple applications of determinants to linear equations; the solution of numerical equations of higher degree, and so much of the theory of equations (not including multiple roots or Sturm's theorem) as is necessary for this purpose.

The topics included under (a) may be treated briefly. About half the time devoted to the requirements should be spent on the topics included under (b).

#### 16-22. Physical Science.\*

#### Elementary Physical Science.

16. Elementary Physics.—A course of study dealing with the leading elementary facts and principles of physics, with quantitative laboratory work by the pupil.

The instruction given in this course should include qualitative lecture-room experiments, and should direct especial attention to the illustrations and applications of physical laws to be found in every-day life. The candidate is required to pass a written examination, the main object of which will be to determine how much she has profited by such instruction. This examination may include numerical problems. It will contain more questions than any one candidate is expected to answer, in order to make allowance for a considerable diversity of instruction in different schools.

The pupil's laboratory work should give practice in the observation and explanation of physical phenomena, some familiarity with methods of measurement, and some training of the hand and the eye in the direction of precision and skill. It should also be regarded as a means of fixing in the mind of the pupil a considerable variety of facts and principles. The candidate is required to pass a laboratory examination, the main object of

<sup>\*</sup>The rules on p. 15, relating to the time of handing in note-books and to candidates examined in June in places where no laboratory examination is provided, applies to candidates examined under the new method also.

which will be to determine how much she has profited by such a laboratory course.

The candidate must name as the basis for her laboratory examination at least thirty-five exercises selected from a list of about sixty, described in a publication issued by Harvard University under the title, "Descriptive List of Elementary Exercises in Physics." In this list the divisions are mechanics (including hydrostatics), light, heat, sound, and electricity (with magnetism). At least ten of the exercises selected must be in mechanics. Any one of the four other divisions may be omitted altogether, but each of the three remaining divisions must be represented by at least three exercises.

The candidate is required to present a note-book in which she has recorded the steps and the results of her laboratory exercises, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes. These exercises need not be the same as those upon which the candidate presents herself for the laboratory examination, but should be equivalent to them in amount and grade of quantitative work.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in physics. Experience has shown that pupils can make the original record of their observations entirely presentable, so that copying will be unnecessary, and they should in general be required to do so.

This course, if taken in the last year of the candidate's preparation, is expected to occupy in laboratory work, recitations, and lectures, five of the ordinary school periods, about fifty minutes in length, per week for the whole year. With few exceptions exercises like those in the Descriptive List already mentioned can be performed in a single school period, but for satisfactory results it will often be necessary to repeat an exercise. Two periods per week for the year should be sufficient for the laboratory work proper. If the course is begun much earlier than the last year of the candidate's preparation, as it well may be, it will require more time.

17. Chemistry.\* — A course of at least sixty experiments, performed

<sup>\*</sup>The course will be mainly an experimental course in theoretical chemistry, but there will be experiments covering all branches of pure chemistry.

at school by the pupil and accompanied with systematic instruction in principles and their applications, in accordance with directions given in a pamphlet entitled "An Outline of Requirements in Chemistry," issued by Harvard University for the use of teachers only.

The candidate is required to pass both a written and a laboratory examination. The written examination will test her acquaintance with the facts and principles of Chemistry. The laboratory examination will test both her skill in performing experiments and her grasp of the principles involved in them. The candidate is further required to present the original note-book in which she recorded the steps and results of the experiments which she performed at school, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in Chemistry.

18. Physiography.—A course of study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Physiography," issued by Harvard University.

For the form of examination see note under Astronomy, below.

19. Anatomy, Physiology, and Hygiene. — A course of study and laboratory work equivalent to that described in a pamphlet entitled "An Outline of Requirements in Anatomy, Physiology, and Hygiene," issued by Harvard University.

The candidate will be required to pass both a written and a laboratory examination. The written examination will test the range and thoroughness of her knowledge of the elements of Anatomy, Physiology, and Hygiene. The laboratory examination will test (a) her ability to perform the experiments described in the Outline of Requirements, and (b) her knowledge of the first aids to be rendered to the injured.

At the time of the laboratory examination the candidate must present the original note-book containing (with dates) the notes and drawings she has

made in the course of her laboratory work, and bearing the endorsement of her teacher, certifying that the book is a true record of the pupil's own observations and experiments. An index of subjects should be appended.

#### Advanced Physical Science.

20. Advanced Physics.\* (Substantially as heretofore.)

The University does not prescribe the experiments to be performed by those offering this subject for admission. The work should, however, be of advanced grade, almost wholly quantitative, and conducted with apparatus, not necessarily elaborate, yet capable, if carefully handled, of yielding results of such accuracy as to warrant the consideration of somewhat minute error. For example, the balance used in weighing should be so delicate as to justify corrections for the buoyancy of the air on the weights and on the body weighed, and, in the determination of specific gravity, for the temperature of the water. The results should be discussed with reference to their precision and to the number of significant figures. There should be about sixty experiments well distributed through the range of general physics. If the student has devoted a considerable amount of time in the elementary course to experiments in heat, that division of physics may be here omitted. The laboratory work can be performed properly only in periods of considerable length, two to four hours, for example.

Instruction by lectures or text-books and work in problems should be a part of the course.

The candidate will be required to pass both a laboratory and a written examination. She should so thoroughly understand the work which she has performed as not to be confused in the laboratory examination by unfamiliar forms of apparatus.

The laboratory note-book will receive careful attention at the time of the examination. It must contain a certificate from the teacher that it is a true record of the candidate's work.

21. Meteorology.—A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Meteorology," issued by Harvard University.

<sup>\*</sup> Equivalent to, but not necessarily identical with, Physics C.

This course requires a knowledge of Elementary Physics. (For the form of examination see under Astronomy, below.)

22. Astronomy.—A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Astronomy," issued by Harvard University.

This course requires a knowledge of Geometry.

In Physiography, Meteorology, and Astronomy, the candidate will be required to take both a written and a laboratory or practical examination. The written examination may test her understanding of observational methods appropriate to the subject, but will call chiefly for a knowledge of facts and principles. The laboratory or practical examination will test her skill in observation as well as her grasp of principles. This examination can be taken in Cambridge only; for those who are examined elsewhere in June, it will be postponed to September.

The laboratory examination in Physiography may include the description, explanation, and comparison of geographical features shown in photographs, maps and models. The laboratory examination in Meteorology may include the use of instruments, the discussion of observations, and the construction and interpretation of weather maps and climatic charts. The practical examination in Astronomy may call for an ability to make simple naked-eye and instrumental observations, and to establish the simpler generalizations of astronomy by discussion of these observations.

The candidate in these subjects will be required to present, at the time of the laboratory or practical examination, the original note-book in which she recorded, with dates, the steps and results of the observations which she made at school. This book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. An index of subjects should be appended. The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of her work through an extended course of observational study, and that her work has been of a satisfactory character; but greater weight will be given to the practical or laboratory examination than to the note-book in determining the candidate's attainments.

#### EXAMINATION PAPERS.

A set of recent examination papers will be sent free to any address, on application to the Secretary.

#### DIVISION OF THE EXAMINATION.

A candidate for admission may take the entire examination at one time, or she may divide it between two years, or between June and September of the same year. If she divides it between two years she is known as a "Preliminary Candidate"; if between June and September of the same year, as a "Postponer." A Preliminary Examination is always taken a year or more before the Final Examination. Postponing candidates, whether in September or June, are taking Final Examinations.

If a study under the old method consists of two parts, designated by the letters (a) and (b), the examinations in those parts may be taken separately by a candidate who divides her examinations for admission either between two years or between June and September of the same year. No other study may be divided.

Under the *old* method, every study will be counted according to the number of hours it formerly occupied in the examination programme as follows:—

	Eler	nent	ary.	Advanced.	
English .			2 hours	Greek	2 hours
Greek .			2 "	Latin	2 "
Latin .			2 "	Greek Composition	hour
German.			ı hour	Latin Composition	ı "
French .			I "	German	2 hours
History .			I "	French	2 "
Algebra.			I "	Logs. and Trig	ı hour
Geometry			I "	Solid Geometry .	ı "
Physics.			I "	Analytic Geometry	ı "
•				Algebra	I "
				Physics :	2 hours
				Chemistry	2 "

Under the new method in each study numbered in bold-faced type (1, 2, 3 etc.) there is one examination which cannot be divided.

#### PRELIMINARY EXAMINATIONS.

A candidate may pass a Preliminary Examination in some of the studies, and be examined in the remaining studies in some subsequent

year. For the Preliminary Examination the candidate must present herself in June, having previously sent in a certificate of preparation.

A Preliminary certificate will be granted to any candidate under the old method who passes the examination in studies occupying five hours on the examination programme; and to any candidate under the new method who passes the examination in studies rated in the aggregate at eight points.

Candidates may offer themselves for the Preliminary Examination in any studies, elementary or advanced, in which their teachers certify that they are prepared, and in no others.

#### OPTIONAL EXAMINATIONS. ANTICIPATION OF COLLEGE STUDIES.

In addition to the examinations required for admission to Radcliffe College, optional examinations are provided for such candidates as have extended their studies beyond the requirements.

- I. A candidate may present herself for examination in any of the Advanced Studies not offered by her for admission, and thus qualify herself to pursue more advanced courses in those subjects in College.
- II. A candidate may present herself for additional examination in one or more of the following studies: (a) any prescribed course or courses of the Freshman year; (b) any elective course or courses intended primarily for undergraduates, provided the courses are of such a character that they may properly be anticipated by examination (see p. 41).

Studies anticipated may be counted toward the degree of Bachelor of Arts in the manner herein provided; but the grade of scholarship attained in an anticipated study is not counted toward distinction or honorable mention with the degree:—

- (1) If the studies anticipated amount to one half of the work of the Freshman year, the student may, upon application, be admitted to the Sophomore class, subject to the condition of making up the deficiency in her Freshman Studies.
- (2) In any case, the studies anticipated shall be placed to the student's credit, and may be used towards satisfying the requirements for the degree of Bachelor of Arts, in either of the following ways:—
- (a) The student may obtain leave from the Academic Board to fulfil the requirements for the degree in three years by taking additional elective studies.

(b) The number of courses regularly required in the Senior year, or in the Senior and Junior years, may be reduced by the amount of the studies anticipated. Permission to make such reduction will be granted, however, only for the purpose of enabling the student to devote time thus gained to her remaining studies.

Applications under (a) and (b) will not ordinarily be acted upon until the close of the student's first year; and the decision upon them will depend upon the quality of the student's record both in her examination for admission, and in her college work.

#### ANTICIPATION OF PRESCRIBED ENGLISH. (ENGLISH A.)

The examination of candidates who anticipate the English of the Freshman year is as follows \*:—

Composition: A. S. Hill's Principles of Rhetoric (edition of 1895); Practice in Writing. — Literature: Swift's Battle of the Books and Gulliver's Travels; Defoe's Robinson Crusoe (Part 1); The Sir Roger de Coverley Papers in the Spectator; Pope's Rape of the Lock, Epistle to Arbuthnot, and Iliad I, VI, XXII; The lives of Swift, Defoe, and Pope in the English Men of Letters Series; Thackeray's English Humorists and Henry Esmond. (This examination will be withdrawn after 1903.)

For another method of anticipating Prescribed Freshman English (English A), see page 19.

#### ADMISSION TO ADVANCED STANDING.

Students may be admitted to advanced standing either (I.) by examination, or (II.) from other colleges without complete examination.

- I. BY EXAMINATION. A candidate may be admitted to the Sophomore, Junior, or Senior Class, if she appear on examination to be versed in the following studies:—
  - 1. The studies required for admission to the Freshman Class.
- 2. All the prescribed studies already pursued by the class for which she offers herself, and as many elective studies as she would have pursued if she had entered at the beginning of the course.

\*Elective courses in English are open, on the same terms as to Sophomores, to students wh have anticipated the prescribed English of the Freshman year.

Examinations for advanced standing are held in such courses only as are intended primarily for undergraduates; and, among these, in such only as may reasonably be anticipated by examination. No laboratory course, no course in composition or discussion, and no other course in which an examination is obviously an inadequate test may be offered for admission to advanced standing.

A candidate may be admitted in spite of deficiencies in some of these studies; but no candidate so admitted is recommended for the degree until she has made good her deficiencies to the satisfaction of the Academic Board.

Candidates for admission to advanced standing may divide the examination between June and September; but a candidate who fails in any subject in June will not be examined again in that subject in September.

The Secretary must receive, not later than September 10, a written notice specifying the elective course or courses in which the candidate wishes to be examined.

II. WITHOUT COMPLETE EXAMINATION. Graduates of other colleges and students from the higher classes of other colleges may be admitted without examination, and assigned to those classes for which their previous training seems to qualify them. Every case is decided on its own merits; but students from other colleges are not admitted ad eundem without examination.

Applications are acted upon at any season of the year. Every person wishing to enter Radcliffe College under this provision must make a complete written statement of the work on which she bases her application. In this she should state how old she is; at what school or schools she received her preparatory training; how long she attended each school; what she studied; how much time she gave to each of the more important studies; and how far she advanced in each before she entered college.

Blank forms of application for admission to advanced standing may be obtained from the Secretary.

Much importance is attached to the quality of the work offered. The applicant is expected to furnish official statements of her rank or grade in her various college studies; and letters, or other evidence, showing the opinion her instructors have formed of her character and scholarship.

Candidates from other colleges may be admitted to Radcliffe College in spite of some deficiencies in their work, on condition that they shall make

good these deficiencies before receiving a degree. Deficiency in one direction may be offset by unusual attainments in another.

#### SPECIAL STUDENTS.

Applicants who pass a satisfactory examination on a smaller number of subjects than are called for in the full Requirements may be admitted, at the discretion of the Academic Board, to such special courses as they seem qualified to pursue.

Students of mature age, who wish to pursue chiefly higher courses of study, may be admitted, at the discretion of the Academic Board, without passing the examination for admission, provided that they satisfy the instructors in the courses which they elect of their fitness to pursue them.

All special students are expected to take four courses of study.

Special students may, on application, receive certificates at the end of their term of study, stating the courses in which they have passed satisfactory examinations, and giving the grade to which they have been assigned in each course.

Special students should make application before the first day of September.

#### STUDENTS AND EXAMINATIONS.

Undergraduates are expected to make their choice of elective studies before the first day of September, and no changes are allowed after October 3, except by leave of the Academic Board. Applications for changes must be made in writing, with a statement of reasons.

The student's choice is limited to those studies which her previous training qualifies her to pursue; and she must observe any restrictions that may be attached to the particular courses she wishes to select. She is further required to avoid any conflict of recitation hours or of examinations between her courses.

No starred (\*) course may be chosen without the *previous* consent of the Instructor. Application should be made, if possible, before the summer vacation.

An undergraduate who wishes to take a Graduate course is required to consult the Instructor in advance; if possible, she should do this before the summer vacation. She will be admitted to the course on the recommendation of the Instructor, which must be given in writing.

Not more than one Course of Research may be taken in any year by an undergraduate.

All students are expected to attend the exercises and to pass all the examinations in the courses which they elect, unless excused by special vote of the Academic Board. Applications for excuses must be made to the Secretary in writing with the reasons.

#### LODGINGS FOR STUDENTS.

Students may learn of lodging-places approved by the Students' Committee by enquiring of the Dean. The ladies of the Standing Committees will be glad to assist students by their advice, whenever it is necessary.

All arrangements for boarding and lodging are to be subject to the approval of the Dean, and the Secretary must be kept constantly informed of the address of every student.

#### GRADUATE STUDENTS.

#### ADMISSION.

Bachelors of Arts of Radcliffe College, and Graduates of other Colleges of good standing who present satisfactory evidence of character and qualifications, are admitted without examination as Graduate Students in Radcliffe College.

An application for admission may be made by filling out and depositing a registration blank at the office. If the applicant is not a graduate of Radcliffe College, she must also file, for the consideration of the Academic Board, satisfactory certificates of scholarship and character; and if she holds a degree from any institution, she must present diplomas or official certificates, sufficient to furnish evidence of such degree or degrees.

Admission as a Graduate Student does not imply admission to candidacy for a Degree.

Graduate Students, not Bachelors of Arts of Radcliffe College, who wish to become candidates for any degree, should make early application to learn the conditions under which they may be accepted as qualified for candidacy.

#### RESIDENCE.

Graduate Students are required to be in regular attendance on the exercises in some course or courses of instruction, and to do all the required work (including all examinations) in the courses which they elect; or to carry on regular work in some Laboratory or Museum or in the Library, under the frequent inspection and criticism of some specified instructor or instructors.

#### STUDIES.

The instruction open to students in Radcliffe College is arranged in one list of Courses of Instruction, consisting of Full Courses and Half-Courses, These are distributed into *three groups* in the several branches of study, namely,

- (1) Courses designed primarily for Undergraduates.
- (2) Courses for Graduates and Undergraduates.
- (3) Courses primarily for Graduates.

Any course (or half-course) in the list is open to all Graduate Students who present sufficient evidence of qualification for that course. It is sometimes advisable, and is not unusual, for a Graduate student to choose some of her studies from the First, or Undergraduate, Group; but such studies are not ordinarily counted for the degree of A. M. Many of the studies of the Second Group are distinctly of Graduate grade, in the sense of being in advance of such as are ordinarily pursued for a Bachelor's degree. They are thorough and comprehensive courses, characterized by advanced methods of instruction and study; and are in fact largely chosen by Graduate Students, and found to be suitable to their needs. To some of these courses, undergraduates are admitted only by special leave of the instructor. To the courses of the Third Group, undergraduates are admitted only on the recommendation of the instructor.

Among the higher courses of instruction—of the Second and Third Groups—in nearly every department of study, are Courses of Research and Seminaries, for students who wish to do special work of an advanced character. These courses are carried on under various plans of administration in the several departments, but always with the object of affording opportunity for regular independent study.

A complete year's work for a Graduate Student regularly consists of

four full courses of instruction, of advanced grade, or of their equivalent in courses and half-courses, pursued with high credit throughout an academic year. All the work required in such courses must be done, and all the examinations must be passed; unless the student has leave from the Academic Board, with the approval of the Instructor, to omit some part of the ordinary requirement.

A student who wishes to devote her time, largely or wholly, to special study of an advanced character may count a course embracing such study as equivalent to more than one course, up to a complete year's work, or may carry on such study outside and in place of the regular courses, under the direction and supervision of some specified Instructor or Instructors. In either case, the substitution proposed must have the approval or consent of the Instructor or Instructors concerned; and the permission of the Academic Board is required.

#### DEGREES.

The requirements for the degrees of Bachelor of Arts and Master of Arts are the same as for the corresponding degrees in Harvard University.

The diplomas are countersigned by the President of Harvard University

and bear the University seal.

The ordinary requirements for the degree of Master of Arts for a Bachelor of Arts of Radcliffe College, or for any student who has been accepted, without special conditions, as qualified for candidacy for the degree on the ground of her previous studies, consists in a full year of residence and study in Radcliffe College, devoted to work approved by the Academic Board of the College as affording suitable preparation for the degree, and completed with high credit. Special conditions are, however, in some cases imposed on the admission to candidacy of a student who is not a Bachelor of Arts of Radcliffe College.

The work approved by the Academic Board for the degree of Master of Arts may consist, wholly or partly, of research or special study, either in connection with or outside of the courses of instruction, carried on under the direction or with the criticism and approval of a specified instructor; or it may be made up of courses of instruction of advanced grade, four such courses being ordinarily required as constituting a full year's work. In any case the programme of study must form a consistent plan of work to be pursued with some definite aim, although it need not lie wholly in one department or field.

#### TUITION FEES.

The annual tuition fee for a student doing full work is two hundred dollars, in addition to the special laboratory fees named below. It is payable, one hundred and twenty-five dollars on October 1, seventy-five dollars on February 1.

For those students who are permitted by the Academic Board to take less than four courses the charges are as follows:—

For any regular course not a laboratory course or course of research, sixty dollars; for any half-course, not a laboratory course, thirty dollars; for a course of research or for a laboratory course, besides the special laboratory fees, a sum equal to the fee for one, two, or more courses, according to the number of courses to which the Academic Board shall consider it equivalent as part of the student's work for the year. But the minimum fee charged for any student is forty dollars, and the maximum fee, in addition to the special laboratory fees, is two hundred dollars, covering any number of courses.

Two-thirds of the fee is payable on the first day of October, the remaining third on the first day of February.

Students in laboratory courses pay in addition a special laboratory fee of five dollars for each course and of five dollars or two and a half dollars for each half-course.

No student will be admitted for any shorter time than a whole academic year, except by special vote of the Academic Board.

At a meeting of the Council of Radcliffe College on December 5th, 1898, it was voted that no student be permitted to attend any College exercise after October 15th in any year unless all bills previously rendered for that year have been paid; and similarly that no student be permitted to attend any College exercise after March 1st unless all bills previously rendered have been paid; and that in no event shall any degree be conferred unless all dues to the College have been paid at least twenty-four hours before Commencement Day.

## THE CHARLES ELIOT NORTON FELLOWSHIP IN GREEK STUDIES.

This fellowship has been established by James Loeb, Esq., of New York, of the Class of 1888, "in grateful recognition of the long and great friendship which Professor Norton has shown him since his boyhood, and in order to record in a fitting manner the eminent services which Professor Norton has rendered the cause of Archæology, and his beneficent prominence in the Archæological Institute of America and the American School of Classical Studies at Athens."

Competition for the fellowship is open to members of the Senior Class in Harvard College and of the Graduate School of Harvard University, and to Seniors and Graduate Students in Radcliffe College. It has an annual income of six hundred dollars.

The award will be made by a committee appointed by the Department of the Classics, of which committee Professor Norton is to be a member during his life, on the basis (1) of a Thesis on a subject approved by this committee, and (2) of such other evidence of scholarship as may be accessible. In the award, no account is to be taken of the financial means of the competitor.

The editors of the Harvard Studies in Classical Philology are to have the right to publish the thesis of the successful candidate.

The incumbent of the fellowship must agree to pursue his studies for the year of his incumbency at the American School of Classical Studies at Athens, and to devote himself to the study of some special subject in the field of Greek History, Literature, Art, Archæology, Epigraphy, or Topography. He shall also agree to write and publish at the end of the year of his fellowship, a monograph embodying the results of his investigations.

In accordance with the terms of the fellowship, the first award will be made in the Spring of 1901, for the academic year 1901-02. The following subjects for theses are proposed by the committee:—

The Idea of Beauty, as developed in Plato's writings and elsewhere in Greek Literature.

A Comparison between the Tragedies of Seneca and their Greek originals.

The Constitution of Athens, from Solon to the Macedonian Conquest. Writing in the Mycenæan Age.

Candidates may, however, with the consent of the committee, write on other classical subjects.

Applications for admission to candidacy must be made to the Chairman of the Department of the Classics not later than November 1, 1901, and the theses of approved candidates must be presented to the Chairman not later than March 1, 1902.

#### SCHOLARSHIPS.

#### THE EDWARD AUSTIN SCHOLARSHIPS.

In 1899, the sum of \$25,500 was received by Radcliffe College in settlement of the bequest of \$30,000, made by Edward Austin, the income thereof to be paid to "needy, meritorious students and teachers, to assist them in payment of their studies."

In 1900 the heirs of Edward Austin gave \$2,250 to be added to this fund.

For the year 1900-01 three scholarships were awarded from the income of this fund, in each case to a teacher of established position, intending to study in Radcliffe College.

One scholarship of \$250 to MABEL LILIAN MERRIMAN, Smith, B. S., 1894, of Northfield, Mass.

One scholarship of \$250 to Mabel Louise Robinson, of Waltham, Mass.

One scholarship of \$200 to Julia Graham Aunspaugh of Lynchburg, Va.

Applications for the year 1901-02 should be in the hands of the Dean by the first day of June, 1901.

#### THE HARVARD ANNEX SCHOLARSHIP.

By gift of the Alumnae and students of the "Harvard Annex" and their friends, an annual scholarship has been established to be known as "The Harvard Annex Scholarship founded by Alumnae of Radcliffe College." The fund provides for the tuition fees of one student.

In 1900-01 this scholarship was awarded to Katharine Elizabeth Fullerton, Radcliffe A. B., 1900.

Applications for this scholarship for the year 1901-02 should be in the hands of the Dean by the first day of June, 1901.

#### THE ELLEN M. BARR SCHOLARSHIPS.

By the terms of the will of the late Ellen M. Barr, the residue of her estate, after the payment of debts and legacies, was bequeathed to Radcliffe College. Subject to the payment of an annuity, the income of this bequest is to be applied "in the form of annual scholarships of not less than two hundred and fifty dollars and not more than three hundred dollars each, for the benefit of students in Radcliffe College, who, in point of character, ability and physical constitution, give promise of future usefulness, and who stand in need of pecuniary assistance."

In 1900-01 five scholarships from this fund of the value of \$250.00 each, were awarded to Katharine Elizabeth Leonard, Charlotte Henrietta Price and Caroline Barnard Shaw of the class of 1901, and to Mabel Louise Abbott and Margaret Eaton Breed of the class of 1902.

Applications for the year 1901-02 should be in the hands of the Dean by the first day of June, 1901.

#### THE ELLA LOWELL LYMAN MEMORIAL SCHOLARSHIP.

By gift of Mr. Arthur T. Lyman of Boston, an annual scholarship has been established in memory of his wife, Ella Lowell Lyman. The fund provides for the tuition fees of one student.

In 1900-01 this scholarship was awarded to MARGARET JANE GRIFFITH of the class of 1903.

Applications for the year 1901-02 should be in the hands of the Dean by the first day of June, 1901.

#### THE ELIZABETH CARY AGASSIZ SCHOLARSHIP.

The Elizabeth Cary Agassiz Scholarship is a gift to Radcliffe College from various friends of Mrs. Agassiz, who wished that it should bear her name. The fund provides for the tuition fees of one student.

In 1900-01 the income of this scholarship was divided between JESSIE MAY DOUGLASS and GRACE VERONICA LYNCH of the class of 1901.

Applications for the year 1901-02 should be in the hands of the Dean by the first day of June, 1901.

#### THE AGNES IRWIN SCHOLARSHIP.

By gift of six hundred and eighty former pupils of the first Dean of Radcliffe College, the Agnes Irwin Scholarship has been established. By the terms of the gift the student to have the benefits of this scholarship is to be appointed by Miss Agnes Irwin, and all details regarding it are to be arranged by her for the present and the future. The fund provides for the tuition fees of one student.

In 1900-01 this scholarship was awarded to Bertha Tappan Davis, a special student.

Applications for the year 1901-02 should be in the hands of the Dean by the first day of June, 1901.

#### THE WIDOW JOANNA HOAR SCHOLARSHIP.

The College has established The Widow Joanna Hoar Scholarship with funds contributed by an unknown friend in memory of the widow of Charles Hoar, Sheriff of Gloucester in England, who came to America with her children in 1638. In awarding this scholarship preference is to be given to natives of Concord, Mass., or to daughters of citizens of that place. The fund at present provides for the tuition fees of one student

In 1900-01 this scholarship was awarded to Lucia Sarah Chamber-Lain, of the class of 1901.

Applications for the year 1901-02 should be in the hands of the Dean by the first day of June, 1901.

#### THE MARIA DENNY FAY MEMORIAL SCHOLARSHIP.

An annual scholarship of two hundred dollars (\$200) has been established, which provides for the tuition fees of one student.

In 1900-01, this scholarship was awarded to IDA GERTRUDE RUGGLI of the class of 1902.

Applications for the year 1901-02 should be in the hands of the Dean by the first day of June, 1901.

#### THE JOSIAH M. FISKE MEMORIAL SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske, of New York City, an annual scholarship has been established in memory of her late husband, Josiah M. Fiske, who was once a resident of Cambridge. The fund provides for the tuition fees of one student.

In 1900-01 this scholarship was awarded to Theodora Bates, of the class of 1903.

Applications for the year 1901-02 should be in the hands of the Dean by the first day of June, 1901.

#### PRIZES.

#### THE SARGENT PRIZE.

This prize was first offered in 1886-87 by John Osborne Sargent of New York, of the class of 1830, and was endowed in his memory, in 1892, by his daughter, Georgiana W. Sargent. The prize is of one hundred dollars, and is offered for the best metrical translation of a lyric poem of Horace, to be selected each year by the Department of the Classics.

The selection for 1901 is the ninth Ode of the third Book.

Undergraduates of Harvard College and of Radcliffe College may compete for this prize. The prize may be withheld if no competitor appears to deserve it.

The versions must be neatly and legibly written or typewritten, upon letter paper, of good quality, of the quarto size, with a margin of not less than one inch at the top, at the bottom, and on each side; and the sheets must be securely stitched or riveted together. The title-page of each manuscript must bear an assumed name, with a statement of the writer's academic standing; and the writer must give in, with her manuscript, a sealed letter, containing her true name and superscribed with her assumed name.

The manuscript must be deposited with the Dean of Radcliffe College on or before the first day of May, 1902.

In 1890 the Sargent Prize was awarded to Helen Leah Reed, of the class of 1890.

In 1892 the Sargent Prize was awarded to MARGARET FOSTER HERRICK, a special student.

#### THE GEORGE B. SOHIER PRIZE.

Mr. Waldo Higginson, of the Class of 1833 in Harvard College, gave to Harvard College a sum to found a Prize in memory of his brother-in-law George B. Sohier of the Class of 1852, which is to be known as the George B. Sohier Prize. The endowment is for "one prize of \$250 for the best thesis presented by a successful candidate for Honors in English or Modern Literature. If no thesis is deemed worthy of a prize, no prize will be given." The competitors may be either (1) undergraduates in Harvard College, (2) Harvard graduates who are resident at the University as students in the Graduate School, or (3) students in Radcliffe College.

In 1897 the Sohier Prize was awarded to Beulah Marie Dix, of the class of 1897. Subject: "Published Collections of English and Scottish Ballads, 1765-1802."

#### THE CAROLINE I. WILBY PRIZE.

This prize was founded in 1897 in memory of Miss Caroline I. Wilby, by her friends and former pupils.

The fund, originally \$3,060, has been somewhat increased, and the income is to be given annually to a Radcliffe student as a prize "for the best original work in any department."

The Wilby Prize was given for the first time in 1899 to KATE O. PETERSEN, Vassar, A. B. 1890, Radcliffe, A. M. 1895, Radcliffe graduate student, 1895-97, for a thesis on the Sources of Chaucer's Nonne Prestes Tale, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1900 to Lucy Allen Paton, A. B., 1892, A. M. 1894, Radcliffe graduate student, 1898–1900, for a thesis on Morgain la Fée, to be published in the series of Radcliffe College Monographs.

The prize may be withheld if no thesis or original work is deemed worthy of this prize.

#### JUNE EXAMINATIONS.

The examinations will be held in the following places:—Cambridge, at 10 Garden Street.

Quincy, in the rooms of the Woodward School.

Andover, in the rooms of Phillips Academy.

Milton, in the rooms of Milton Academy.

Groton, in the rooms of Groton School.

Southborough, in the rooms of St. Mark's School.

Worcester, in the rooms of the English High School.

Springfield, in the rooms of the Springfield High School.

Fall River, in the Durfee High School Building.

South Byfield, in the rooms of Dummer Academy.

Exeter, N. H., in the rooms of Phillips Exeter Academy.

Concord, N. H., in the rooms of St. Paul's School.

Portland, Me., in the rooms of the Portland High School.

Pomfret Centre, Conn., in the rooms of the Pomfret School.

Washington, Conn., in the rooms of the Gunnery.

New York, N. Y., in the lecture room of the Young Men's Christian Association, Twenty-third Street, corner of Fourth Avenue.

Garden City, N. Y., in the rooms of St. Paul's Cathedral School.

Albany, N. Y., in the rooms of the Young Men's Christian Association. Buffalo, N. Y., in the High School Building, corner of Court and Franklin Streets.

Morristown, N. J., in the rooms of Morristown School.

Philadelphia, Pa., in the rooms of the Young Men's Christian Association Building, corner of Fifteenth and Chestnut Streets.

Pottstown, Pa., in the rooms of the Hill School.

Washington, D. C., in the rooms of the Central High School.

Louisville, Ky., in the rooms of the Young Men's Christian Association, corner of Fourth Avenue and Broadway.

Lima, Ind., in the rooms of Howe School.

Milwaukee, Wis., in the rooms of the East Division High School.

Cleveland, O., in the Central High School Building.

Cincinnati, O., in the rooms of the Young Men's Christian Association.

Youngstown, O., in the rooms of Rayen School.

Chicago, Ill.

St. Paul, Minn.

St. Louis, Mo.

Denver, Col., in the rooms of the Denver High School (District No. 1), corner of Nineteenth and Stout Streets.

San Francisco, Cal., in the rooms of the Mechanics' Institute, 31 Post Street.

Belmont, Cal., in the rooms of Belmont School.

Portland, Oregon, in the lecture-room of the Portland Library.

Bonn, Germany, at the Hotel Kley.

Honolulu, Hawaii.

#### RADCLIFFE COLLEGE.

#### ORDER OF EXAMINATIONS. (June and September.)

Monday, June 24, and September 16.

- Candidates offering the subjects of this day meet at 10 Garden Street the officer in charge of the 2.30 р. м. examinations
- 3-4. Anatomy, Physiology and Hygiene.
- 5-6. Astronomy.

Tuesday, June 25 and September 17.

- 8.00 A. M. Candidates offering the subjects of this day, except those who presented themselves Monday, meet at 10 Garden Street the officer in charge of the examinations.
- 9-11. Advanced German.
- 2-4.Advanced French.
- 114-124. Chemistry.
- Logarithms and Trigonometry. 4-5.
- 124-14. Advanced Algebra. 5-6.
  - Advanced Physics.

Wednesday, June 26, and September 18.

- All candidates, except those who have previously presented themselves, meet at 10 Garden Street, the 8.00 A. M. officer in charge of the examinations.
- 8-9.  $1\frac{1}{2}$ - $3\frac{1}{2}$ . Advanced History.  $3\frac{1}{2}$ - $6\frac{1}{2}$ . English (b). Elementary Physics.
- 94-103. Elementary French. 11-124. Elementary German.

Thursday, June 27, and September 19.

- 8-9.  $2\frac{1}{4}$ - $3\frac{3}{4}$ . Elementary History. Physiography. 9-11. Advanced Latin. Elementary Latin. 4-6.
- Elementary Greek. 114-14.

Friday, June 28, and September 20.

- $1\frac{3}{4} 3\frac{3}{4}$ . 8-9. Meteorology. Elementary English (a). 91-101. Plane Geometry. 4-6. Advanced Greek.
- 94-114. Geometry.
- 111-1. Elementary Algebra.

Saturday, June 29, and September 21.

9-10. Solid Geometry. 11-12. Analytic Geometry. 10-11. Greek Composition. Latin Composition. 12-1.

#### SEPTEMBER EXAMINATIONS.

The September Examinations will be held in Cambridge only, on Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, September 16, 17, 18, 19, 20, and 21.

#### Examinations in English A, German A, and French A.

In 1901, the examination in English A will be held in accordance with the programme given below. This examination, formerly held in Cambridge only, is now held in June at all the places in which the Harvard College admission examinations are held in 1901.

WEDNESDAY, JUNE 26, AND SEPTEMBER 18.

 $3\frac{1}{2}-6\frac{1}{2}$  P. M. English A.

This examination is not identical with the examination in English (b).

The examinations in German A and French A correspond to the admission examinations in Elementary German and French, and will be held on WEDNESDAY, JUNE 26, and WEDNESDAY, SEPTEMBER 18.

Monographs prepared by the students are published and sold by Messrs. Ginn & Company.

Besides the present publication, Radcliffe College issues annually a list of its Courses of Study and an Annual Report. These documents, and also separate pamphlets, published by Harvard University, giving detailed accounts of the work of the principal departments, may be had by addressing

Radcliffe College,
Cambridge, Massachusetts.

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# Madcliffe College

CAMBRIDGE, MASSACHUSETTS

1902



\*\* The legal title of the Corporation (to be used in making gifts and bequests) is "RADCLIFFE COLLEGE." It should be described as established in Cambridge, Massachusetts.

Correspondence should be addressed to RADCLIFFE COLLEGE, Cambridge, Massachusetts.

The College buildings are open to visitors interested in the work of the College, during both vacations and term-time; though students only are admitted to the class-rooms during the hours of lectures.

The Reference Library is in Fay House.

The Laboraic of Chemistry, Physics and Botany are in buildings on the grounds.

The Laboratory of Biology occupies quarters in the Museum of Comparative Zoölogy on Oxford Street, by permission of the Curator.

The Gymnasium is open to all students without charge.

The Dean and the Secretary may be consulted at Fay House during term-time, and special appointments may be made as required.

The Academic year begins on the Thursday following the last Wednesday in September. In 1902 it is September 25. Students report for registration at 9 A.M. of that day.

The summer vacation begins on the last Tuesday in June, and ends on the last Wednesday in September.

The Christmas recess is from Dec. 23, 1902, to Jan. 2, 1903. inclusive.

The Spring recess is from April 19 to April 25, 1903, inclusive.

### Radcliffe College.

RADCLIFFE COLLEGE, the successor of the Society for the Collegiate Instruction of Women, offers systematic collegiate instruction to women under the professors and other teachers of Harvard University. More than a hundred instructors of the University are teachers in Radcliffe College.

Fay House contains the recitation rooms and offices, and a select working library. The College has four laboratories, of Physics, Chemistry, Botany, and Biology. The collections of the Museum of Comparative Zoölogy, the Peabody Museum of American Archaeology, the University Museums of Geology, Botany, and Mineralogy, and the Semitic Museum, are also open to the students; and, by vote of the President and Fellows of Harvard College, the students have the use of the University Library, containing 500,000 volumes. Opportunities for study in the Astronomical Observatory, the Botanic Garden, and the Herbarium are also afforded.

The requirements for admission are identical with those for admission to Harvard College. The courses of instruction given in Radcliffe College correspond to both "undergraduate" and "graduate" courses offered by Harvard University, and are more than sufficient to enable a woman to perform the work required by the University for the degrees of A. B. and A. M. In addition to these, Graduate Students in Radcliffe College have access to a large number of Graduate courses in Harvard University. The examinations are the same in both institutions, and the diplomas conferring the degrees of A. B. and A. M. are countersigned by the President of Harvard University as a guarantee that these degrees are equivalent to the corresponding degrees given by the University.

For provisions for the admission of Special Students and Graduate Students, see pages 34, 35, 36 and 37.



### Associates of Radcliffe College.

ELIZABETH CARY AGASSIZ.

EZRA HENRY BAKER, A. B.

WILLIAM ELWOOD BYERLY, PH. D.

ARTHUR ASTOR CAREY, A. B.

MARY COES, A. M.

MARY HUNTINGTON COOKE.

LILIAN HORSFORD FARLOW.

ARTHUR GILMAN, A.M.

STELLA SCOTT GILMAN.

GEORGE LINCOLN GOODALE, M.D., LL.D.

WILLIAM WATSON GOODWIN, Ph. D., LL. D., D.C.L.

JOHN CHIPMAN GRAY, LL. D.

HENRY LEE HIGGINSON, A. M.

AGNES IRWIN, LITT. D.

VIRGINIA NEWHALL JOHNSON, A. B.

ALICE MARY LONGFELLOW.

GRACE HARRIET MACURDY.

ELLEN FRANCIS MASON.

FANNY PEABODY MASON.

JOHN FARWELL MOORS, A. M.

CHARLES ELIOT NORTON, LITT. D., LL. D

JAMES MILLS PEIRCE, A. M.

CLEMENT LAWRENCE SMITH, A. M., LL. D.

JOSEPH BANGS WARNER, A.M., LL. B.

SARAH WYMAN WHITMAN.

President.

ELIZABETH C. AGASSIZ.

Bean.

AGNES IRWIN.

Treasurer.

HENRY LEE HIGGINSON.

Council.

ELIZABETH C. AGASSIZ, Chairman.

AGNES IRWIN.

WILLIAM E. BYERLY.

Ex-officio.

John Chipman Gray.

JOHN F. Moors.

ALICE M. LONGFELLOW.

WILLIAM W. GOODWIN. SARAH W. WHITMAN.

CLEMENT L. SMITH.

LILIAN HORSFORD FARLOW.

Academic Board.

WILLIAM E. BYERLY, Chairman.

ELIZABETH C. AGASSIZ.

AGNES IRWIN.

Ex-officio.

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HANS CARL GÜNTHER VON JAGEMANN

CHARLES HALL GRANDGENT.

GEORGE LYMAN KITTREDGE.

Secretary.

MARY COES.

Librarian.

CAROLINE A. FARLEY.

Medical Adviser to the College.

HENRY PICKERING WALCOTT, A.B., M.D.

### Standing Committees.

The House Committee in charge of buildings, house-service, grounds, and repairs and additions, Mrs. Whitman, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Mrs. Farlow, Miss Longfellow, Mr. Warner.

The Students' Committee in charge of the general discipline of the students, oversight of their homes while in Cambridge, and of their amusements, clubs, and social life, MISS LONGFELLOW, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Mrs. Cooke, Mrs. Farlow, Miss Coes, Mrs. Johnson.

The Library Committee with general supervision of the Library, Mrs. Farlow, Chairman, Mrs. Agassiz (ex-officio), Miss Irwin, Professor Goodwin, Miss E. F. Mason.

The Finance Committee in charge of all matters pertaining to Expenditure, Endowment Fund, etc., Professor Gray, Chairman, Mr. Baker, Professor Byerly, Mrs. Farlow, Mr. Gilman, Mr. Higginson, Miss Irwin, Mr. Moors, Mr. Warner.

The Committee on the Gymnasium, Mrs. FARLOW, Chairman, Miss Irwin, Mr. Carey, Mrs. Johnson, Miss Longfellow.

The College keeps a list of those students who have received degrees or certificates and wish to find positions as teachers, for the information of school officers and others who may require their services.



## REQUIREMENTS FOR ADMISSION TO RADCLIFFE COLLEGE.

## ADMISSION OF CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS.

The requirements for admission to Radcliffe College are the same as those for admission to Harvard College. Radcliffe College holds no independent entrance examinations, but is authorized to make arrangements by which women can take the Harvard Examinations and have their work submitted to the Harvard Examiners. These examinations may be taken in Cambridge, and in other places in which the Harvard examinations are held in June. The September examinations are held in Cambridge only.

Two examinations of candidates for admission will be held in Cambridge in 1902, in Fay House. The days and hours are given in detail on page forty-seven of this pamphlet.

The academic year begins on Thursday, September 25, 1902. All students register at the Office on that day at nine A. M.

Any one expecting to take admission examinations should register for such examinations on a form which may be obtained from the Secretary. When writing for this form she should say whether she is a Preliminary or a Final Candidate. The Registration Blanks of all candidates who wish to take examinations in June should be properly filled out and in the hands of the Secretary by June 10; those of candidates who wish to take examinations in September, by September 10.

Every candidate for admission to Radcliffe College is required to furnish a testimonial of honorable dismissal from the school or college which she has attended, or from the tutor with whom she has studied. She must also refer to two persons from whom information about her may be obtained. References should be sent to the Secretary of the college a month before the examination.

A fee of five dollars for the whole examination is to be paid by each candidate in June, and again in September if she then presents herself. For this a receipt will be given and the amount will be deducted from the first payment for tuition. The fee will not be returned to a candidate who does not enter college.

#### TERMS OF ADMISSION TO RADCLIFFE COLLEGE.

The studies which may be presented in satisfaction of the requirements for admission to the Freshman Class in Radcliffe College are named together in the following lists. The figure attached to each study indicates the relative weight which will be given to that study in determining the question of the candidate's fitness for admission:

Elementary	Advanced
English (4)	
Greek (4)	Greek (2)
Latin (4)	Latin (2)
German (2)	German (2)
French (2)	French (2)
	One of the following four:
Ancient History (2)	Ancient History (2)
or	English and American
English and American	History (2)
History (2)	History of Europe (2)
	History of a period (2)
Algebra (2)	Algebra (1)
Geometry (3)	Logarithms and Trigo-
or	nometry (1)
Plane Geometry (2)	Astronomy (1)
Solid Geometry (1)	
Physics (2)	Physics (2)
Chemistry (2)	Meteorology (1)
Physiography (1)	
Anatomy, etc. (1)	

A candidate for admission must offer from this list studies amounting to 26 points, of which points at least four must be in advanced studies. The studies offered must include:—

English	•								4		
One ancient language (Elem. Latin or Elem.											
Greek)									4		
One modern foreign language (Elem. German											
or Elem.	Frenc	h)							2		
Elementary	Hist	ory							2		
Algebra									2		
Geometry of	r Pla	ne G	eom	etry					3	or	2
Studies amounting to two points from the fol-											
lowing sciences (Elem. Physics, Chemistry,											
Physiography, Anatomy, etc., Astronomy)									2		
									19 or 18		

No candidate may offer an advanced study who does not at the same time or earlier offer the corresponding Elementary study; but Physics is considered Elementary with respect to Meteorology, and Geometry or Plane Geometry, with respect to Astronomy.

Candidates who are looking forward to the extended study of English or of any other modern literature are advised to acquire a knowledge of Greek as well as of Latin.

# DEFINITIONS OF REQUIREMENTS.

#### GOOD ENGLISH.

Clear and idiomatic English is expected in all examination papers and note-books written by candidates for admission. Teachers are requested to insist on good English, not only in translations, but in every exercise in which the pupil has occasion to write or to speak English.

## 1. English.

A candidate for admission to Radcliffe College may take either (a) the examination in Elementary English, as heretofore, or (b) the examination described below, which, besides satisfying the requirement in Elementary English, will exempt her from the prescribed English of the first year (English A); provided, however, that if she passes with Grade D she will be required to take before the end of her second year a half-course in English Composition in addition to her regular elective courses.

## (a) Elementary English.

The examination in English will consist of two parts, which, however, cannot be taken separately:—

I. The candidate will be required to write a paragraph or two on each of several topics chosen by her from a considerable number—perhaps ten or fifteen—set before her on the examination paper. In 1902 the topics will be drawn from the following works:—

Shakspere's Merchant of Venice; Pope's Iliad, Books I, VI, XXII, XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Cooper's Last of the Mohicans; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

In 1903, 1904, and 1905 the topics will be drawn from the following works:—

Shakspere's Merchant of Venice and Julius Caesar; The Sir Roger de Coverly papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe, Carlyle's Essay on Burns; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

The candidate is expected to read intelligently all the books prescribed. She should read them as she reads other books; she is expected, not to know them minutely, but to have freshly in mind their most important parts. In every case the examiner will regard knowledge of the book as less important than ability to write English.

As additional evidence of preparation, the candidate may present an exercise-book, properly certified by her instructor, containing compositions or other written work.

II. A certain number of books will be prescribed for careful study. This part of the examination will be upon subject-matter, literary form, and logical structure, and will also test the candidate's ability to express her knowledge with clearness and accuracy.

The books prescribed for this part of the examination in 1902, 1903, 1904 and 1905 are:—

Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

No candidate will be accepted in English whose work is seriously defective in point of spelling, punctuation, grammar, or division into paragraphs.

In connection with the reading and study of the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry should be committed to memory. The essentials of English grammar should not be neglected in preparatory study.

The English written by a candidate in any of her examination-books may be regarded as part of her examination in English, in case the evidence afforded by the examination-book in English is insufficient. A candidate who has passed this examination in Elementary English with a grade of A or B may take a second examination, which, if passed with a grade of A or B, shall exempt her from the prescription of English A (prescribed Freshman English).

At this second examination, which will be held in September only, a candidate will write one or more compositions on topics to be selected by her from a list comprising subjects in English Literature, the Classics, French and German authors, History and Science. The examination will occupy two hours.

# (b) English.

The examination will consist of questions in Rhetoric,\* questions in Literary History from the time of Shakspere, and compositions—based on the following works:—

Palgrave:

Golden Treasury (First Series)

Shakspere:

Julius Caesar

The Merchant of Venice

Macbeth

Twelfth Night or As You Like

Ιt

King Lear or Hamlet

Milton:

L'Allegro

Il Penseroso

Comus Bunyan:

The Pilgrim's Progress, or

Defoe:

Robinson Crusoe

Dryden:

Alexander's Feast

To the Memory of Mr. Oldham Upon the Death of the Earl of

Dundee

\* A. S. Hill's Principles of Rhetoric is used for the corresponding Study in Radcliffe College, and is recommended for use in preparation for this examination.

Swift:

The Voyage to Lilliput

Addison and Steele:

The Sir Roger de Coverley Papers

Pope:

Epistle to Arbuthnot

Goldsmith:

The Vicar of Wakefield
The Deserted Village

Scott:

The Lady of the Lake

Ivanhoe

Quentin Durward

Macaulay:

Life of Johnson Lays of Ancient Rome

Byron:

Mazeppa

The Prisoner of Chillon

Irving:

The Legend of Sleepy Hollow Rip Van Winkle

Tales of a Traveller

Thackeray:

Henry Esmond

D ckens:

A Tale of Two Cities, or David Copperfield Browning: Selections, for example,

Cavalier Tunes

The Lost Leader

How They Brought the Good

News from Ghent to Aix

Evelyn Hope

Home Thoughts, from Abroad Home Thoughts, from the Sea

Incident of the French

Camp

The Boy and the Angel

One Word More

Hervé Riel

Pheidippides

Tennyson: Selections, for example,

Enid

Elaine

The Passing of Arthur The Lady of Shalott

The Lotus Eaters

Ulysses Tithonus

The Revenge

Franklin:

Autobiography

Hawthorne:

The House of the Seven Gables

Longfellow:

Tales of a Wayside Inn

Lowell:

The Vision of Sir Launfal

The candidate is expected to read all the books prescribed.\* She should read them as she reads other books, not trying to remember them in detail, but regarding each work as a whole and giving it such appreciation as shall enable her to write about it intelligently. In every case the

<sup>\*</sup> In connection with the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry committed to memory.

examiner will regard knowledge of the books as less important than ability to write English; if the examination book in English affords insufficient evidence, he will examine the written work of the candidate in other subjects.

No candidate will be accepted in English whose work is seriously faulty in spelling, grammar, punctuation, or division into paragraphs.

Preparation for the examination should occupy at least three school hours, or periods, a week for four years. Throughout the course frequent short compositions should be required as well as occasional long ones. Topics should be chosen by the pupil herself whenever that is possible; and the topics assigned by the instructor should be within the range of the pupil's knowledge and sympathies, and should be such as to awaken interest and stimulate intelligence. Criticism should be constant and thorough; it should take account of merits as well as of faults, and should never interfere with the honest expression of opinion or with the free play of individuality in thought and expression. Mechanical methods of every kind should be avoided; and attention should be fixed on principles rather than rules.

As to the right way of studying Rhetoric, attention is called to the following extract from the Report of the Vassar Conference:\*

"Though it is clear that the power to write a language can be obtained only by unremitting practice, yet, in the opinion of the Conference, such practice may properly be accompanied and illustrated by a course in elementary rhetoric. This course should include not only the principles of clearness, force, and good taste, but the principles of the arrangement of clauses in the sentence and of sentences in the paragraph. The teacher should bear in mind that any body of written English, of whatever length, is an organic unit, with principles that apply as well to the arrangement of the minor elements as to the grouping of the larger divisions of essay or book. Especial care should be taken that rhetoric is not studied by itself or for its own sake. Its connection with the pupil's actual written or spoken exercises should be kept constantly in view."

In 1902 the examination will be held on Friday, June 27th, at all the places where other examinations for admission are held and on Friday, September 19th, at Cambridge only. It will occupy three hours beginning at 3 P. M.

After 1903 the examination for the anticipation of English A (p. 32) will be withdrawn.

<sup>\*</sup>Report of the Committee of Ten, page 95, section 8.

## 2, 3. Greek.

## 2. Elementary Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least two school years. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of simple Attic prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) A thorough examination on a prescribed portion of Xenophon (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Attic prose, involving the use of such words, constructions, and idioms only as occur in the portion of Xenophon prescribed.

The portion of Xenophon prescribed for this examination is the second book of the Anabasis. Two year's notice will be given of any change in the selection.

#### 3. Advanced Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least three school years. The second part of the examination (Greek Composition) is optional, and may be omitted without loss of credit:—

- (a) The translation at sight of Attic prose and of Homer, with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into Attic prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Greek prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

<sup>\*</sup>The pages of the more recent Teubner text editions are taken as a standard in this statement.

The estimate of the periods of study necessary to prepare for the elementary and advanced examinations in Greek is based on the assumption that the candidate has begun the study of Latin at least a year earlier, and has continued it along with her Greek course; otherwise the periods specified would not be sufficient.

In preparation for the elementary examination in Greek, candidates should read from 130 to 170 pages\* of Attic prose. For the advanced examination candidates should read from 30 to 50 pages more of Attic prose, and from 3000 to 5000 verses of Homer. The reading of Homer may be advantageously begun with a thorough study of Iliad, Books I and II (to the catalogue of ships).

The pupil should be constantly guided in proper methods of reading, and trained to read the Greek intelligently, as Greek, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Greek, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Greek Composition, pupils should be trained, from an early stage of the preparatory course, to render into Greek, not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

## 4, 5. Latin.

# 4. Elementary Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *three* school years. The two parts of the examination cannot be taken separately:—

(a) The translation at sight of simple Latin prose and verse. (The passages set for translation must be rendered into simple and idiomatic English.)

<sup>\*</sup> See footnote, p. 14.

(b) A thorough examination on a prescribed portion of Cicero's speeches (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose, involving the use of such words, constructions, and idioms only as occur in the speeches prescribed.

The portion of Cicero prescribed for this examination is the second, third, and fourth speeches against Catiline. Two years' notice will be given of any change in the selection.

#### 5. Advanced Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *four* school years. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of Latin prose and verse with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into Latin prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the examinations in Latin is made with reference to schools which have a four years' course. Schools which have a five years' course may more advantageously provide for beginning the study of Latin in the first year, with some diminution, if necessary, of the time devoted to it in the last years of the course.

The course of reading pursued in preparation for the examinations in Latin should include:—

- (a) Easy reading, included in or following a suitable introductory book ('Latin Lessons'), amounting to from 30 to 40 pages;\*
  - (b) Nepos (Lives) and Caesar (Gallic War), 90 to 120 pages;

<sup>\*</sup> See footnote, p. 14.

- (c) Cicero, 90 to 120 pages, including the four speeches against Catiline and the speech on the Manilian Law, with additional speeches selected by the teacher;
- (d) Virgil and Ovid, 6000 to 10,000 verses, including the first six books of the Aeneid.

Preparation for the elementary examination alone should include (a) and (b), the four speeches against Catiline, and from 2000 to 3000 verses of Virgil, or of Ovid and Virgil.

The pupil should be constantly guided in proper methods of reading, and trained to read the Latin intelligently, as Latin, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Latin, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Latin Composition, pupils should be trained, from an early stage of the preparatory course, to render into Latin not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

## 6, 7. German.

# 6. Elementary German.

- (a) The translation at sight of simple German prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of simple English sentences, or of easy connected prose, to test the candidate's familiarity with elementary grammar.

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than two hundred pages of easy German (including reading at sight in class).

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugation of the weak and the more usual strong verbs; the declension of articles, adjectives, pronouns, and such nouns as are readily classi-

fied; the commoner prepositions; the simpler uses of the modal auxiliaries; the elements of syntax, especially the rules governing the order of words.

Pronunciation should be carefully taught, and the pupils should have frequent opportunities to hear German spoken or read aloud. The writing of German from dictation is recommended as a useful exercise.

## 7. Advanced German.

- (a) The translation at sight of ordinary German. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of those who have read, in addition to the amount specified under Elementary German, not less than five hundred pages of classical and contemporary prose and verse. It is recommended that the reading be selected from such works as the following: Riehl, Culturgeschichtliche Novellen; Freytag, Bilder aus der deutschen Vergangenheit, Die Journalisten; Kohlrausch, Das Jahr 1813; Schiller, Der dreissigjährige Krieg, Wilhelm Tell, Maria Stuart, Die Jungfrau von Orleans; Goethe, Hermann und Dorothea, Egmont, Iphigenie; Lessing, Minna von Barnhelm. About one half of the amount read should be Nineteenth Century prose.

In the translation into German candidates will be expected to show a thorough knowledge of accidence, the elements of word-formation, the principal uses of prepositions and conjunctions, and the essentials of syntax, especially the uses of the modal auxiliaries, and of the subjunctive and infinitive modes.

It is recommended that the candidate be trained to follow a recitation conducted in German and to answer in that language questions asked by the instructor.

## 8, 9. French.

# 8. Elementary French.

- (a) The translation at sight of ordinary Nineteenth Century prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of simple English sentences or of easy connected prose, to test the candidate's familiarity with elementary gram-

mar. Proficiency in grammar may also be tested by direct questions, based on the passages set for translation under (a).

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than four hundred pages (including reading at sight in class) from the works of at least three different authors. It is desirable that a portion of the reading should be from works other than works of fiction.

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugations of regular verbs, of the more frequent irregular verbs, such as aller, envoyer, tenir, pouvoir, voir, vouloir, dire, savoir, faire, and those belonging to the classes represented by ouvrir, dormir, connaître, conduire, and craindre; the forms and positions of personal pronouns and of possessive, demonstrative, and interrogative adjectives; the inflection of nouns and adjectives for gender and number, except rare case; the uses of articles, and the partitive constructions.

Pronunciation should be carefully taught, and pupils should have frequent opportunities to hear French spoken or read aloud. The writing of French from dictation is recommended as a useful exercise.

# 9. Advanced French.

- (a) The translation at sight of standard French. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of candidates who have read, in addition to the amount specified under Elementary French, not less than six hundred pages of prose and verse from the writings of at least four standard authors. A considerable part of the amount read should be carefully translated into idiomatic English.

Candidates will be expected to show a thorough knowledge of accidence and familiarity with the essentials of French syntax, especially the uses of tenses, modes, prepositions, and conjunctions.

It is recommended that the candidate be trained to follow a recitation conducted in French and to answer in that language questions asked by the instructor.

## 10, 11. History (including Historical Geography).

## 10. Elementary History.

Either of the two following groups, each including two fields of historical study: —

- 1. Greek and Roman History.—(a) Greek History to the death of Alexander, with due reference to Greek life, Literature, and art. (b) Roman History to the accession of Commodus, with due reference to literature and government.
- 2. English and American History. (a) English History, with due reference to social and political development. (b) American History, with the elements of Civil Government.

For preparation in each of the two historical fields presented, a course of study equivalent to at least three lessons a week for one year will be necessary.

The candidate will be expected to show on examination such general knowledge of each field as may be acquired from the study of an accurate text-book of not less than 300 pages, supplemented by suitable parallel readings amounting to not less than 500 pages. The examination will call for comparison of historical characters, periods, and events, and in general for the exercise of judgment as well as of memory. Geographical knowledge will be tested by means of an outline map.

In the judgment of the Department of History it is desirable that Greek and Roman History be offered as a part of the preparation of every candidate.

# 11. Advanced History.

Any one of the four courses of study which follow: -

- 1. Greek History to the destruction of Corinth and Roman History to the death of Constantine (open to those candidates only who have offered English and American History as an elementary study).
- 2. English History and American History (open to those candidates only who have offered Greek and Roman History as an elementary study).
- 3. European History from the Germanic conquests to the beginning of the Seventeenth Century.

4. A year's study of any one of the four historical fields defined under Elementary History and not already offered by the candidate, together with a year's detailed study of a limited period \* within that field, selected with the approval of the Department of History.

The examination in the second part of 4 will be specially adapted to the particular period selected and will be held in Cambridge only.

In every case the candidate will be expected to show on examination such an acquaintance with the whole field as may be gained from the study of good text-books, together with substantial parallel readings, and, further, such a detailed knowledge of some part of the field as may be gained from suitable topical study. A higher standard of acquirement and of power to combine results will be expected than in the elementary requirement.

As further evidence of the candidate's proficiency satisfactory written work, done at school and certified by the teacher, must be submitted at the time of the examination. It must be presented in the form of a notebook (or bound collection of notes), containing not less than 50 written pages on each historical field offered, and must show practice in some of the following exercises:—

- (a) Notes and digests of the pupil's reading outside of the text-books.
- (b) Brief written tests requiring the application to new questions of knowledge previously acquired.
  - (c) Parallels between historical characters or periods.
- (d) Short studies of topics limited in scope, prepared outside of the class-room and illustrated by some reference to contemporary material.
- (e) Historical maps or charts showing explorations, migrations, conquests, territorial changes, or social conditions.

## 12-15. Mathematics.

A thorough practical acquaintance with ordinary Arithmetic is assumed as underlying all preparation in Mathematics. Knowledge of the fundamental principles of Arithmetic and careful training in accurate computation with whole numbers and with vulgar and decimal fractions form an essential part of early school work. But the pupil's time should not be wasted in the solution by arithmetic of puzzling problems which properly

<sup>\*</sup>For example, the Spartan and Theban supremacies, the period of the Punic wars, the Stuart Period, the transition from the American colonial to the federal system.

belong to algebra, or in complicated and useless reductions, or in the details of commercial arithmetic. It is desirable that some familiarity with algebraic expressions and symbols, including the methods of solving simple equations, be acquired in connection with the course in Arithmetic.

## Elementary Mathematics.

12. Elementary Algebra.—Algebra, through Quadratic Equations, The requirement in Algebra includes the following subjects: factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem for positive integral powers of the binomial, and the extraction of roots; putting questions into equations and the reduction of equations; the ordinary methods of elimination and the solution of both numerical and literal equations of the first and second degrees with one or more unknown quantities and of problems leading to such equations.

The student should cover carefully the whole ground here specified, and should acquire a thorough understanding not only of the practice, but of the reasons involved in the elementary algebraic rules; for example, in the rules of multiplication, of signs, and of exponents, in the rules for fractions, and in those relating to the reduction and solution of equations. She should train herself to practical skill by the solution of a large number of examples, and should learn to do her work with reasonable quickness, as well as with confidence, accuracy, and clearness. The solution of fairly complicated literal quadratics, the various methods of elimination for equations of the first two degrees, the putting of problems in a neat manner into equations, and the working of the various algebraic operations both for integral and fractional expressions may be mentioned as important subjects of attention. The student should be taught to arrange her work in a clear, orderly, and compact fashion.

The time supposed to be devoted to the systematic study of the requirement in Algebra is the equivalent of a course of three lessons a week through two school years.

13. Geometry.— Plane and Solid Geometry, including problems in mensuration of plane and solid figures, and original propositions in Plane Geometry.

Geometric education should begin in the kindergarten or primary school, where the child should acquire familiarity through the senses with simple geometric forms, by inspecting, drawing, modelling, and measuring them, and noting their more obvious relations. This study should be followed, in the grammar school, by systematic instruction in Concrete (or Observational) Geometry, of which geometric drawing should form a part. Such instruction should include the main facts of Plane and Solid Geometry, treated as matters of observation, and not as exercises in logical deduction, without however necessarily excluding the beginnings of deductive proof as soon as the pupil is ready for them. Concrete Geometry is believed to have important educational value, and to prepare an excellent foundation for the later study of Formal Geometry. It belongs, however, to the earlier stages of school work, and should not be postponed until the time that belongs to direct preparation for college or the scientific school.

In teaching Formal Geometry, stress should be laid from the outset an accuracy of statement and elegance of form, as well as on clear and strict reasoning. As soon as the pupil has begun to acquire the art of rigorous demonstration, her work should cease to be merely receptive, she should be trained to devise constructions and demonstrations for herself, and this training should be carried through the whole of the work in Plane Geometry. Teachers are advised, in their selection of a text-book, to choose one having a clear tendency to call out the pupil's own powers of thought, prevent the formation of mechanical habits of study, and encourage the concentration of mind which it is a part of the discipline of mathematical study to foster. The subject of Geometry, not a particular treatise, is what the pupil should be set to learn; and its simpler methods and conceptions should be made a part of her habitual and instinctive thought. Lastly, the pupil should be stimulated to good work by interest in the study felt and exhibited by the teacher.

The requirement in Geometry embraces the following topics: the general properties of plane rectilinear figures; the circle and the measure of angles; similar polygons; areas; regular polygons, and the measure of the circle; the relations of planes and lines in space; the properties and measure of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle. The propositions required under these several heads are those only which are contained in the older treatises, and which are recognized as constituting the Elements of Geometry. The examination does not include the additions introduced into some recent text-books,

although most of those additions are in themselves valuable for the student who has time and taste for extra study in this field. A syllabus of the required propositions has been prepared. [This syllabus may be obtained, price 10 cents, at the Publication Office, 2 University Hall, Cambridge.]

The examination in Geometry also includes original propositions in Plane Geometry, based on the propositions named in the syllabus, and problems in mensuration in both Plane and Solid Geometry; but excellence in bookwork and in exercises immediately illustrating bookwork will be allowed to offset in part any lack of skill in original work.

The time which it is recommended to assign to the systematic study of the requirement in Formal Geometry is the equivalent of a course of five lessons a week for one school year; but it is believed to be advisable to extend this allowance of time over two years.

## 13a. Plane Geometry.

The requirements in Plane Geometry is stated on pages 1-14 of the Syllabus mentioned above.

13b. Solid Geometry. — Chauvenet's Geometry, Revised and Abridged (Philadelphia: J. B. Lippincott & Co.), Books VI, VII, VIII and IX, will serve to indicate the nature and amount of the requirement in Solid Geometry.

#### Advanced Mathematics.

14. Logarithms and Trigonometry.—The theory of logarithms and the use of logarithmic tables.—Plane trigonometry.—The solution of the right spherical triangle.—Applications to simple problems.

No technical knowledge of the subjects of surveying and navigation, such, for instance, as the methods of parallel or middle latitude sailing, will be required, but such terms as latitude, longitude, angle of elevation or depression, bearing, etc., should be understood. At the examination, candidates are furnished with four-place tables belonging to the University, and are not allowed to use their own tables. The tables provided are distributed before the hour of examination, so that candidates may have at least an hour for becoming acquainted with their arrangement and use. Teachers who wish a still earlier opportunity of seeing these tables should write to the Secretary of Radcliffe College.

## 15. Advanced Algebra.

The requirement in Advanced Algebra includes the following subjects:

- (a) Simultaneous quadratics and equations solved like quadratics; properties of quadratic equations; addition, subtraction, multiplication and division of complex quantities; inequalities; variations; arithmetical and geometrical progressions; mathematical induction; simple problems in choice and chance; continued fractions; scales of notation.
- (b) Determinants, not including the multiplication theorem; simple applications of determinants to linear equations; the solution of numerical equations of higher degree, and so much of the theory of equations (not including multiple roots or Sturm's theorem) as is necessary for this purpose.

The topics included under (a) may be treated briefly. About half the time devoted to the requirements should be spent on the topics included under (b).

## 16-22. Physical Science.\*

# Elementary Physical Science.

16. Elementary Physics.—A course of study dealing with the leading elementary facts and principles of physics, with quantitative laboratory work by the pupil.

The instruction given in this course should include qualitative lectureroom experiments, and should direct especial attention to the illustrations
and applications of physical laws to be found in every-day life. The candidate is required to pass a written examination, the main object of which
will be to determine how much she has profited by such instruction. This
examination may include numerical problems. It will contain more
questions than any one candidate is expected to answer, in order to make
allowance for a considerable diversity of instruction in different schools.

The pupil's laboratory work should give practice in the observation and explanation of physical phenomena, some familiarity with methods of measurement, and some training of the hand and the eye in the direction

<sup>\*</sup>For rules relating to the time of handing in note-books and to candidates examined in June in places where no laboratory examination is provided, see p. 29,

of precision and skill. It should also be regarded as a means of fixing in the mind of the pupil a considerable variety of facts and principles. The candidate is required to pass a laboratory examination, the main object of which will be to determine how much she has profited by such a laboratory course.

The candidate must name as the basis for her laboratory examination at least thirty-five exercises selected from a list of about sixty, described in a publication issued by Harvard University under the title, "Descriptive List of Elementary Exercises in Physics." In this list the divisions are mechanics (including hydrostatics), light, heat, sound, and electricity (with magnetism). At least ten of the exercises selected must be in mechanics. Any one of the four other divisions may be omitted altogether, but each of the three remaining divisions must be represented by at least three exercises.

The candidate is required to present a note-book in which she has recorded the steps and the results of her laboratory exercises, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes. These exercises need not be the same as those upon which the candidate presents herself for the laboratory examination, but should be equivalent to them in amount and grade of quantitative work.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in physics. Experience has shown that pupils can make the original record of their observations entirely presentable, so that copying will be unnecessary, and they should in general be required to do so.

This course, if taken in the last year of the candidate's preparation, is expected to occupy in laboratory work, recitations, and lectures, five of the ordinary school periods, about fifty minutes in length, per week for the whole year. With few exceptions exercises like those in the Descriptive List already mentioned can be performed in a single school period, but for satisfactory results it will often be necessary to repeat an exercise. Two periods per week for the year should be sufficient for the laboratory work proper. If the course is begun much earlier than the last year of the candidate's preparation, as it well may be, it will require more time.

17. Chemistry.\*—A course of at least sixty experiments, performed at school by the pupil and accompanied with systematic instruction in principles and their applications, in accordance with directions given in a pamphlet entitled "An Outline of Requirements in Chemistry," issued by Harvard University for the use of teachers only.

The candidate is required to pass both a written and a laboratory examination. The written examination will test her acquaintance with the facts and principles of Chemistry. The laboratory examination will test both her skill in performing experiments and her grasp of the principles involved in them. The candidate is further required to present the original note-book in which she recorded the steps and results of the experiments which she performed at school, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in Chemistry.

18. Physiography. — A course of study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Physiography," issued by Harvard University.

For the form of examination see note under Astronomy, below.

19. Anatomy, Physiology, and Hygiene. — A course of study and laboratory work equivalent to that described in a pamphlet entitled "An Outline of Requirements in Anatomy, Physiology, and Hygiene," issued by Harvard University.

The candidate will be required to pass both a written and a laboratory examination. The written examination will test the range and thoroughness of her knowledge of the elements of Anatomy, Physiology, and Hygiene. The laboratory examination will test (a) her ability to perform the experiments described in the Outline of Requirements, and (b) her knowledge of the first aids to be rendered to the injured.

<sup>\*</sup>The course will be mainly an experimental course in theoretical chemistry, but there will be experiments covering all branches of pure chemistry.

At the time of the laboratory examination the candidate must present the original note-book containing (with dates) the notes and drawings she has made in the course of her laboratory work, and bearing the endorsement of her teacher, certifying that the book is a true record of the pupil's own observations and experiments. An index of subjects should be appended.

## Advanced Physical Science.

## 20. Advanced Physics.\*

The University does not prescribe the experiments to be performed by those offering this subject for admission. The work should, however, be of advanced grade, almost wholly quantitative, and conducted with apparatus, not necessarily elaborate, yet capable, if carefully handled, of yielding results of such accuracy as to warrant the consideration of somewhat minute error. For example, the balance used in weighing should be so delicate as to justify corrections for the buoyancy of the air on the weights and on the body weighed, and, in the determination of specific gravity, for the temperature of the water. The results should be discussed with reference to their precision and to the number of significant figures. There should be about sixty experiments well distributed through the range of general physics. If the student has devoted a considerable amount of time in the elementary course to experiments in heat, that division of physics may be here omitted. The laboratory work can be performed properly only in periods of considerable length, two to four hours, for example.

Instruction by lectures or text-books and work in problems should be a part of the course.

The candidate will be required to pass both a laboratory and a written examination. She should so thoroughly understand the work which she has performed as not to be confused in the laboratory examination by unfamiliar forms of apparatus.

The laboratory note-book will receive careful attention at the time of the examination. It must contain a certificate from the teacher that it is a true record of the candidate's work.

21. Meteorology.—A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Meteorology," issued by Harvard University.

<sup>\*</sup> Equivalent to, but not necessarily identical with, Physics C.

This course requires a knowledge of Elementary Physics. (For the form of examination see under Astronomy, below.)

22. Astronomy.—A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Astronomy," issued by Harvard University.

This course requires a knowledge of Geometry.

In Physiography, Meteorology, and Astronomy, the candidate will be required to take both a written and a laboratory or practical examination. The written examination may test her understanding of observational methods appropriate to the subject, but will call chiefly for a knowledge of facts and principles. The laboratory or practical examination will test her skill in observation as well as her grasp of principles. This examination can be taken in Cambridge only; for those who are examined elsewhere in June, it will be postponed to September.

The laboratory examination in Physiography may include the description, explanation, and comparison of geographical features shown in photographs, maps and models. The laboratory examination in Meteorology may include the use of instruments, the discussion of observations, and the construction and interpretation of weather maps and climatic charts. The practical examination in Astronomy may call for an ability to make simple naked-eye and instrumental observations, and to establish the simpler generalizations of astronomy by discussion of these observations.

The candidate in these subjects will be required to present, at the time of the laboratory or practical examination, the original note-book in which she recorded, with dates, the steps and results of the observations which she made at school. This book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. An index of subjects should be appended. The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of her work through an extended course of observational study, and that her work has been of a satisfactory character; but greater weight will be given to the practical or laboratory examination than to the note-book in determining the candidate's attainments.

#### LABORATORY EXAMINATIONS.

A candidate who is examined in any study in which a laboratory examination is held will hand in her laboratory note-book at the hour of the

laboratory examination. Laboratory note-books will be deposited, after examination, in the Secretary's office, where they will be kept for a reasonable time, subject to the order of the owners.

A candidate examined in June at any place where a laboratory examination is not provided will be required to take such an examination in Cambridge in the autumn; but if she passes the written examination in June and presents a satisfactory note-book, the subject will be temporarily counted in her favor in determining the question of her admission to College. Similarly a Preliminary candidate is allowed to postpone her laboratory examination, until September of the year in which she enters College.

#### EXAMINATION PAPERS.

A set of recent examination papers will be sent free to any address, on application to the Secretary.

#### DIVISION OF THE EXAMINATION.

A candidate for admission may take the entire examination at one time, or she may divide it under conditions named below, (1) between two years, or (2) between June and September of the same year. If she divides it between two years she is known in the first year as a "Preliminary Candidate"; if between June and September of the same year, she is called a "Postponing Candidate." A Preliminary Examination is always taken a year or more before the Final Examination. Postponing candidates whether in September or in June, are taking Final Examinations. With the approval of the principal or (in case the the candidate has attended no school in the year preceeding her Final Examination) with the approval of a responsible tutor, a candidate holding a Preliminary Certificate may divide her Final Examination between June and September.

In each study numbered in bold-faced type (1, 2, 3 etc.) there is one examination which cannot be divided.

#### PRELIMINARY EXAMINATIONS.

A candidate may pass a Preliminary Examination in some of the studies, and be examined in the remaining studies in some subsequent

year. For the Preliminary Examination the candidate must present herself in June, having previously sent in a certificate of preparation.

A Preliminary certificate will be granted to any candidate who passes the examination in studies rated in the aggregate at eight points.

Candidates may offer themselves for the Preliminary Examination in any studies, elementary or advanced, in which their teachers certify that they are prepared, and in no others.

#### OPTIONAL EXAMINATIONS. ANTICIPATION OF COLLEGE STUDIES.

In addition to the examinations required for admission to Radcliffe College, optional examinations are provided for such candidates as have extended their studies beyond the requirements.

- I. A candidate may present herself for examination in any of the Studies not offered by her for admission, and thus qualify herself to pursue more advanced courses in those subjects in College.
- II. A candidate may present herself for additional examination in one or more of the following studies: (a) any prescribed course or courses of the Freshman year; (b) any elective course or courses intended primarily for undergraduates, provided the courses are of such a character that they may properly be anticipated by examination (see p. 33).

Studies anticipated may be counted toward the degree of Bachelor of Arts in the manner herein provided; but the grade of scholarship attained in an anticipated study is not counted toward distinction or honorable mention with the degree:—

- (1) If the studies anticipated amount to one half of the work of the Freshman year, the student may, upon application, be admitted to the Sophomore class, subject to the condition of making up the deficiency in her Freshman Studies.
- (2) In any case, the studies anticipated shall be placed to the student's credit, and may be used towards satisfying the requirements for the degree of Bachelor of Arts, in either of the following ways:—
- (a) The student may obtain leave from the Academic Board to fulfil the requirements for the degree in three years by taking additional elective studies.
- (b) The student may obtain leave from the Academic Board to reduce the number of courses required in the Senior year, or in the Senior and Junior years, by the amount of the studies anticipated.

Applications under (a) and (b) will not ordinarily be acted upon until the close of the student's first year; and the decision upon them will depend upon the quality of the student's record both in her examination for admission, and in her college work.

## ANTICIPATION OF PRESCRIBED ENGLISH. (ENGLISH A.)

The examination of candidates who anticipate the English of the Freshman year is as follows \*:—

Composition: A. S. Hill's Principles of Rhetoric (edition of 1895); Practice in Writing. — Literature: Swift's Battle of the Books and Gulliver's Travels; Defoe's Robinson Crusoe (Part 1); The Sir Roger de Coverley Papers in the Spectator; Pope's Rape of the Lock, Epistle to Arbuthnot, and Iliad I, VI, XXII; The lives of Swift, Defoe, and Pope in the English Men of Letters Series; Thackeray's English Humorists and Henry Esmond. (This examination will be withdrawn after 1903.)

For another method of anticipating Prescribed Freshman English (English A), see page 11.

#### ADMISSION TO ADVANCED STANDING.

Students may be admitted to advanced standing either (I.) by examination, or (II.) from other colleges without complete examination.

- I. BY EXAMINATION. A candidate may be admitted to the Sophomore, Junior, or Senior Class, if she appear on examination to be versed in the following studies:—
  - 1. The studies required for admission to the Freshman Class.
- 2. All the prescribed studies already pursued by the class for which she offers herself, and as many elective studies as she would have pursued if she had entered at the beginning of the course.

Examinations for advanced standing are held in such courses only as are intended primarily for undergraduates; and, among these, in such

<sup>\*</sup>Elective courses in English are open, on the same terms as to Sophomores, to students who have anticipated the prescribed English of the Freshman year.

only as may reasonably be anticipated by examination. No laboratory course, no course in composition or discussion, and no other course in which an examination is obviously an inadequate test may be offered for admission to advanced standing.

A candidate may be admitted in spite of deficiencies in some of these studies; but no candidate so admitted is recommended for the degree until she has made good her deficiencies to the satisfaction of the Academic Board.

Candidates for admission to advanced standing may divide the examination between June and September; but a candidate who fails in any subject in June will not be examined again in that subject in September.

The Secretary must receive, not later than September 10, a written notice specifying the elective course or courses in which the candidate wishes to be examined.

II. WITHOUT COMPLETE EXAMINATION. Graduates of other colleges and students from the higher classes of other colleges may be admitted without examination, and assigned to those classes for which their previous training seems to qualify them. Every case is decided on its own merits; but students from other colleges are not admitted ad eundem without examination.

Applications are acted upon at any season of the year. Every person wishing to enter Radcliffe College under this provision must make a complete written statement of the work on which she bases her application. In this she should state how old she is; at what school or schools she received her preparatory training; how long she attended each school; what she studied; how much time she gave to each of the more important studies; and how far she advanced in each before she entered college.

Blank forms of application for admission to advanced standing without complete examination may be obtained from the Secretary.

Much importance is attached to the quality of the work offered. The applicant is expected to furnish official statements of her rank or grade in her various college studies; and letters, or other evidence, showing the opinion her instructors have formed of her character and scholarship.

Candidates from other colleges may be admitted to Radcliffe College in spite of some deficiencies in their work, on condition that they shall make good these deficiencies before receiving a degree. Deficiency in one direction may be offset by unusual attainments in another.

#### SPECIAL STUDENTS.

Applicants who pass a satisfactory examination on a smaller number of subjects than are called for in the full Requirements may be admitted, at the discretion of the Academic Board, to such special courses as they seem qualified to pursue.

Students of mature age, who wish to pursue chiefly higher courses of study, may be admitted, at the discretion of the Academic Board, without passing the examination for admission, provided that they satisfy the instructors in the courses which they elect of their fitness to pursue them.

All special students are expected to take four courses of study.

Special students may, on application, receive certificates at the end of their term of study, stating the courses in which they have passed satisfactory examinations, and giving the grade to which they have been assigned in each course.

Special students should make application before the first day of September.

#### STUDENTS AND EXAMINATIONS.

Undergraduates are expected to make their choice of elective studies before the first day of September, and no changes are allowed after October I, except by leave of the Academic Board. Applications for changes must be made in writing, with a statement of reasons.

The student's choice is limited to those studies which her previous training qualifies her to pursue; and she must observe any restrictions that may be attached to the particular courses she wishes to select. She is further required to avoid any conflict of recitation hours or of examinations between her courses.

No starred (\*) course may be chosen without the *previous* consent of the Instructor. Application should be made, if possible, before the summer vacation.

An undergraduate who wishes to take a Graduate course is required to consult the Instructor in advance; if possible, she should do this before the summer vacation. She will be admitted to the course on the recommendation of the Instructor, which must be given in writing.

Not more than one Course of Research may be taken in any year by an undergraduate.

All students are expected to attend the exercises and to pass all the examinations in the courses which they elect, unless excused by special vote of the Academic Board. Applications for excuses must be made to the Secretary in writing with the reasons.

### LODGINGS FOR STUDENTS.

Students may learn of lodging-places approved by the Students' Committee by enquiring of the Dean. The ladies of the Standing Committees will be glad to assist students by their advice, whenever it is necessary.

All arrangements for boarding and lodging are to be subject to the approval of the Dean, and the Secretary must be kept constantly informed of the address of every student.

#### GRADUATE STUDENTS.

#### ADMISSION.

Bachelors of Arts of Radcliffe College, and Graduates of other Colleges of good standing who present satisfactory evidence of character and qualifications, are admitted without examination as Graduate Students in Radcliffe College.

An application for admission may be made by filling out and depositing a registration blank at the office. If the applicant is not a graduate of Radcliffe College, she must also file, for the consideration of the Academic Board, satisfactory certificates of scholarship and character; and if she holds a degree from any institution, she must present diplomas or official certificates, sufficient to furnish evidence of her holding such degree or degrees.

Admission as a Graduate Student does not imply admission to candidacy for a Degree.

Graduate Students, not Bachelors of Arts of Radcliffe College, who wish to become candidates for any degree, should make early application to learn the conditions under which they may be accepted as qualified for candidacy.

#### RESIDENCE.

Graduate Students are required to be in regular attendance on the exercises in some course or courses of instruction, and to do all the required work (including all examinations) in the courses which they elect; or to carry on regular work in some Laboratory or Museum or in the Library, under the frequent inspection and criticism of some specified instructor or instructors.

#### STUDIES.

The instruction open to students in Radcliffe College is arranged in one list of Courses of Instruction, consisting of Full Courses and Half-Courses, These are distributed into *three groups* in the several branches of study, namely,

- (1) Courses designed primarily for Undergraduates.
- (2) Courses for Graduates and Undergraduates.
- (3) Courses primarily for Graduates.

Any course (or half-course) in the list is open to all Graduate Students who present sufficient evidence of qualification for that course. It is sometimes advisable, and is not unusual, for a Graduate student to choose some of her studies from the First, or Undergraduate, Group; but such studies are not ordinarily counted for the degree of A. M. Many of the studies of the Second Group are distinctly of Graduate grade, in the sense of being in advance of such as are ordinarily pursued for a Bachelor's degree. They are thorough and comprehensive courses, characterized by advanced methods of instruction and study; and are in fact largely chosen by Graduate Students, and found to be suitable to their needs. To some of these courses, undergraduates are admitted only by special leave of the instructor. To the courses of the Third Group, undergraduates are admitted only on the recommendation of the instructor.

Among the higher courses of instruction—of the Second and Third Groups—in nearly every department of study, are Courses of Research and Seminaries, for students who wish to do special work of an advanced character. These courses are carried on under various plans of administration in the several departments, but always with the object of affording opportunity for regular independent study.

A complete year's work for a Graduate Student regularly consists of

four full courses of instruction, of advanced grade, or of their equivalent in courses and half-courses, pursued with high credit throughout an academic year. All the work required in such courses must be done, and all the examinations must be passed; unless the student has leave from the Academic Board, with the approval of the Instructor, to omit some part of the ordinary requirement.

A student who wishes to devote her time, largely or wholly, to special study of an advanced character may count a course embracing such study as equivalent to more than one course, up to a complete year's work, or may carry on such study outside and in place of the regular courses, under the direction and supervision of some specified Instructor or Instructors. In either case, the substitution proposed must have the approval or consent of the Instructor or Instructors concerned; and the permission of the Academic Board is required.

#### DEGREES.

The requirements for the degrees of Bachelor of Arts and Master or Arts are the same as for the corresponding degrees in Harvard University.

The diplomas are countersigned by the President of Harvard University and bear the University seal.

The ordinary requirements for the degree of Master of Arts for a Bachelor of Arts of Radcliffe College, or for any student who has been accepted, without special conditions, as qualified for candidacy for the degree on the ground of her previous studies, consists in a full year of residence and study in Radcliffe College, devoted to work approved by the Academic Board of the College as affording suitable preparation for the degree, and completed with high credit. Special conditions are, however, in some cases imposed on the admission to candidacy of a student who is not a Bachelor of Arts of Radcliffe College.

The work approved by the Academic Board for the degree of Master of Arts may consist, wholly or partly, of research or special study, either in connection with or outside of the courses of instruction, carried on under the direction or with the criticism and approval of a specified instructor; or it may be made up of courses of instruction of advanced grade, four such courses being ordinarily required as constituting a full year's work. In any case the programme of study must form a consistent plan of work to be pursued with some definite aim, although it need not lie wholly in one department or field.

#### TUITION FEES.

The annual tuition fee for a student doing full work is two hundred dollars, in addition to the special laboratory fees named below. It is payable, one hundred and twenty-five dollars on October 1, seventy-five dollars on February 1.

For those students who are permitted by the Academic Board to take less than four courses the charges are as follows:—

For any regular course not a laboratory course or course of research, sixty dollars; for any half-course, not a laboratory course, thirty dollars; for a course of research or for a laboratory course, besides the special laboratory fees, a sum equal to the fee for one, two, or more courses, according to the number of courses to which the Academic Board shall consider it equivalent as part of the student's work for the year. But the minimum fee charged for any student is forty dollars, and the maximum fee, in addition to the special laboratory fees, is two hundred dollars, covering any number of courses.

Two-thirds of the fee is payable on the first day of October, the remaining third on the first day of February.

Students in laboratory courses pay in addition a special laboratory fee of five dollars for each course and of five dollars or two and a half dollars for each half-course.

No student will be admitted for any shorter time than a whole academic year, except by special vote of the Academic Board.

At a meeting of the Council of Radcliffe College on December 5th, 1898, it was voted that no student be permitted to attend any College exercise after October 15th in any year unless all bills previously rendered for that year have been paid; and similarly that no student be permitted to attend any College exercise after March 1st unless all bills previously rendered have been paid; and that in no event shall any degree be conferred unless all dues to the College have been paid at least twenty-four hours before Commencement Day.

# THE CHARLES ELIOT NORTON FELLOWSHIP IN GREEK STUDIES.

This fellowship has been established by James Loeb, Esq., of New York, of the Class of 1888, "in grateful recognition of the long and great friendship which Professor Norton has shown him since his boyhood, and in order to record in a fitting manner the eminent services which Professor Norton has rendered the cause of Archæology, and his beneficent prominence in the Archæological Institute of America and the American School of Classical Studies at Athens."

Competition for the fellowship is open to members of the Senior Class in Harvard College and of the Graduate School of Harvard University, and to Seniors and Graduate Students in Radcliffe College. It has an annual income of six hundred dollars.

The award will be made by a committee appointed by the Department of the Classics, of which committee Professor Norton is to be a member during his life, on the basis (1) of a Thesis on a subject approved by this committee, and (2) of such other evidence of scholarship as may be accessible. In the award, no account is to be taken of the financial means of the competitor.

The editors of the Harvard Studies in Classical Philology are to have the right to publish the thesis of the successful candidate.

The incumbent of the fellowship must agree to pursue his studies for the year of his incumbency at the American School of Classical Studies at Athens, and to devote himself to the study of some special subject in the field of Greek History, Literature, Art, Archæology, Epigraphy, or Topography. He shall also agree to write and publish at the end of the year of his fellowship, a monograph embodying the results of his investigations.

In accordance with the terms of the fellowship, the second award will be made in the Spring of 1902, for the academic year 1902-03. The following subjects for theses are proposed by the committee:—

Pericles's Conception of Athnea as the National Diety.

The Greek Sources of Seneca's Tragedies.

Greek Armour with especial reference to the form and ornamentation of the Helmet.

Greek Myths of which the sole evidence is in Works of Art.

Candidates may, however, with the consent of the committee, write on other classical subjects.

Applications for admission to candidacy must be made to the Chairman of the Department of the Classics not later than December 1, 1902, and the theses of approved candidates must be presented to the Chairman not later than March 1, 1903.

#### SCHOLARSHIPS

#### THE EDWARD AUSTIN SCHOLARSHIPS.

In 1899, the sum of \$25,500 was received by Radcliffe College in settlement of the bequest of \$30,000, made by Edward Austin, the income thereof to be paid to "needy, meritorious students and teachers, to assist them in payment of their studies."

In 1900 the heirs of Edward Austin gave \$2,250 to be added to this fund.

For the year 1901-02 three scholarships were awarded from the income of this fund.

One scholarship of \$250 to Muriel Bothwell Carr (McGill University), A. B., 1898, A. M., 1900, of St. John, N. B.

One scholarship of \$200 to Margaret Edith Henry (University of Nebraska), A. B., 1898, A. M., 1900, of Lincoln, Nebraska.

One scholarship of \$200 to Adelaide Florence True (Colby College), A. B., 1890, of Waterville, Maine.

Applications for the year 1902-03 should be in the hands of the Dean by the first day of June, 1902.

#### THE HARVARD ANNEX SCHOLARSHIP.

By gift of the Alumnae and students of the "Harvard Annex" and their friends, an annual scholarship has been established to be known as "The Harvard Annex Scholarship founded by Alumnae of Radcliffe College." The fund provides for the tuition fees of one student.

In 1901-02 this scholarship was awarded to Sylvia Knowlton Lee, Bryn Mawr, A. B., 1901.

Applications for this scholarship for the year 1902-03 should be in the hands of the Dean by the first day of June, 1902.

#### THE ELLEN M. BARR SCHOLARSHIPS.

By the terms of the will of the late Ellen M. Barr, the residue of her estate, after the payment of debts and legacies, was bequeathed to Radcliffe College. Subject to the payment of an annuity, the income of this bequest is to be applied "in the form of annual scholarships of not less than two hundred and fifty dollars and not more than three hundred dollars each, for the benefit of students in Radcliffe College, who, in point of character, ability and physical constitution, give promise of future usefulness, and who stand in need of pecuniary assistance."

In 1901-02 five scholarships from this fund of the value of \$250.00 each, were awarded to Rosalie Yvonnette Abbot of the class of 1902, and to Theodora Bates, Margaret Jane Griffith, Frances Margaretta Kendall and Bessie Savory Stickney of the class of 1903.

Applications for the year 1902-03 should be in the hands of the Dean by the first day of June, 1902.

## THE ELLA LOWELL LYMAN MEMORIAL SCHOLARSHIP.

By gift of Mr. Arthur T. Lyman of Boston, an annual scholarship has been established in memory of his wife, Ella Lowell Lyman. The fund provides for the tuition fees of one student.

In 1901-02 this scholarship was awarded to Helen Cartwright McCleary of the class of 1904.

Applications for the year 1902-03 should be in the hands of the Dean by the first day of June, 1902.

## THE ELIZABETH CARY AGASSIZ SCHOLARSHIP.

The Elizabeth Cary Agassiz Scholarship is a gift to Radcliffe College from various friends of Mrs. Agassiz, who wished that it should bear her name. The fund provides for the tuition fees of one student.

In 1901-02 the income of this scholarship was divided between MARY ALDEN PRENTISS of the class of 1903, and EDITH BRINCKERHOFF SMITH of the class of 1902.

Applications for the year 1902-03 should be in the hands of the Dean by the first day of June, 1902.

#### THE AGNES IRWIN SCHOLARSHIP.

By gift of six hundred and eighty former pupils of the first Dean of Radcliffe College, the Agnes Irwin Scholarship has been established. By the terms of the gift the student to have the benefits of this scholarship is to be appointed by Miss Agnes Irwin, and all details regarding it are to be arranged by her for the present and the future. The fund provides for the tuition fees of one student.

In 1901-02 this scholarship was awarded to Sigrid Sophie Eckman of the class of 1904.

Applications for the year 1902-03 should be in the hands of the Dean by the first day of June, 1902.

## THE WIDOW JOANNA HOAR SCHOLARSHIP.

The College has established The Widow Joanna Hoar Scholarship with funds contributed by an unknown friend in memory of the widow of Charles Hoar, Sheriff of Gloucester in England, who came to America with her children in 1638. In awarding this scholarship preference is to be given to natives of Concord, Mass., or to daughters of citizens of that place. The fund at present provides for the tuition fees of one student.

In 1901-02 this scholarship was awarded to Constance Alton Willard, of the class of 1903.

Applications for the year 1902-03 should be in the hands of the Dean by the first day of June, 1902.

## THE MARIA DENNY FAY MEMORIAL SCHOLARSHIP.

An annual scholarship of two hundred dollars (\$200) has been established, which provides for the tuition fees of one student.

In 1901-02, this scholarship was awarded to VERA WELLS LITTLE-FIELD of the class of 1902.

Applications for the year 1902-03 should be in the hands of the Dean by the first day of June, 1902.

# THE JOSIAH M. FISKE MEMORIAL SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske, of New York City, an annual scholarship has been established in memory of her late husband, Josiah M. Fiske, who was once a resident of Cambridge. The fund provides for the tuition fees of one student.

In 1901-02 this scholarship was awarded to IDA ALICE SLEEPER, of the class of 1904.

Applications for the year 1902-03 should be in the hands of the Dean by the first day of June, 1902.

#### PRIZES.

#### THE SARGENT PRIZE.

This prize was first offered in 1886-87 by John Osborne Sargent of New York, of the class of 1830, and was endowed in his memory, in 1892, by his daughter, Georgiana W. Sargent. The prize is of one hundred dollars, and is offered for the best metrical translation of a lyric poem of Horace, to be selected each year by the Department of the Classics.

The selection for 1902 is the eighth Ode of the fourth Book.

Undergraduates of Harvard College and of Radcliffe College may compete for this prize. The prize may be withheld if no competitor appears to deserve it.

The versions must be neatly and legibly written or typewritten, upon letter paper, of good quality, of the quarto size, with a margin of not less than one inch at the top, at the bottom, and on each side; and the sheets must be securely stitched or riveted together. The title-page of each manuscript must bear an assumed name, with a statement of the writer's academic standing; and the writer must give in, with her manuscript, a sealed letter, containing her true name and superscribed with her assumed name.

The manuscript must be deposited with the Dean of Radcliffe College on or before the first day of May, 1902.

In 1890 the Sargent Prize was awarded to Helen Leah Reed, of the class of 1890.

In 1892 the Sargent Prize was awarded to MARGARET FOSTER HERRICK, a special student.

In 1901 the Sargent Prize was awarded to NORMA ROSE WATERBURY, of the class of 1904.

#### THE GEORGE B. SOHIER PRIZE.

Mr. Waldo Higginson, of the Class of 1833 in Harvard College, gave to Harvard College a sum to found a Prize in memory of his brother-in-law George B. Sohier of the Class of 1852, which is to be known as the George B. Sohier Prize. The endowment is for "one prize of \$250 for the best thesis presented by a successful candidate for Honors in English or Modern Literature. If no thesis is deemed worthy of a prize, no prize will be given." The competitors may be either (1) undergraduates in Harvard College, (2) Harvard graduates who are resident at the University as students in the Graduate School, or (3) students in Radcliffe College.

In 1897 the Sohier Prize was awarded to Beulah Marie Dix, of the class of 1897. Subject: "Published Collections of English and Scottish Ballads, 1765-1802."

#### THE CAROLINE I. WILBY PRIZE.

This prize was founded in 1897 in memory of Miss Caroline I. Wilby, by her friends and former pupils.

The fund, originally \$3,060, has been somewhat increased, and the income is to be given annually to a Radcliffe student as a prize "for the best original work in any department."

The Wilby Prize was given for the first time in 1899 to KATE O. PETER-SEN, Vassar, A. B. 1890, Radcliffe, A. M. 1895, Radcliffe graduate student, 1895-97, for a thesis on the Sources of Chaucer's Nonne Prestes Tale, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1900 to LUCY ALLEN PATON, A. B., 1892, A. M. 1894, Radcliffe graduate student, 1808-1900, for a thesis on Morgain Fée, to be published in the series of Radcliffe College Monographs.

The prize may be withheld if no thesis or original work is deemed worthy of this prize.

## JUNE EXAMINATIONS.

The examinations will be held in the following places:— Cambridge, at 10 Garden Street.

Andover, in the rooms of Phillips Academy.

Milton, in the rooms of Milton Academy.

Groton, in the rooms of Groton School.

Southborough, in the rooms of St. Mark's School.

Worcester, in the rooms of the English High School.

Springfield, in the rooms of the Springfield High School.

Fall River, in the Durfee High School Building.

South Byfield, in the rooms of Dummer Academy.

Exeter, N. H., in the rooms of Phillips Exeter Academy.

Concord, N. H., in the rooms of St. Paul's School.

Portland, Me., in the rooms of the Portland High School.

Pomfret Centre, Conn., in the rooms of the Pomfret School.

Washington, Conn., in the rooms of the Gunnery.

New York, N. Y., in the lecture room of the Young Men's Christian Association, Twenty-third Street, corner of Fourth Avenue.

Garden City, N. Y., in the rooms of St. Paul's Cathedral School.

Albany, N. Y., in the rooms of the Young Men's Christian Association. Buffalo, N. Y., in the High School Building, corner of Court and Franklin Streets.

Morristown, N. J., in the rooms of Morristown School.

Philadelphia, Pa., in the rooms of the Young Men's Christian Association Building, corner of Fifteenth and Chestnut Streets.

Pottstown, Pa., in the rooms of the Hill School.

Washington, D. C., in the rooms of the Central High School.

Louisville, Ky., in the rooms of the Young Men's Christian Association, corner of Fourth Avenue and Broadway.

Lima, Ind., in the rooms of Howe School.

Milwaukee, Wis., in the rooms of the East Division High School.

Cleveland, O., in the Central High School Building.

Cincinnati, O., in the rooms of the Young Men's Christian Association.

Youngstown, O., in the rooms of Rayen School.

Chicago, Ill., in the rooms of the Young Men's Christian Association, 153 LaSalle Street.

St. Paul, Minn., in the rooms of St. Paul Academy, 155 Western Ave.

St. Louis, Mo., in the rooms of the Board of Education, 9th and Locust Streets.

Denver, Col., in the rooms of the Denver High School (District No. 1), corner of Nineteenth and Stout Streets.

San Francisco, Cal., in the rooms of the Mechanics' Institute, 31 Post Street.

Belmont, Cal., in the rooms of Belmont School.

Portland, Oregon, in the lecture-room of the Portland Library.

Bonn, Germany, at the Hotel Kley.

Honolulu, Hawaii.

## RADCLIFFE COLLEGE.

## ORDER OF EXAMINATIONS. (June and September.)

Monday, June 23, and September 15.

8-9 а. м.	All	candidates	meet	at	10	Garden	Street	the	officer	in ch	arge
	of t	he examinat	tions.								

9-10.	Elementary Physics.	2-3	Plane Geometry.
104-12.	Elementary French.	2-4.	Geometry.
124-14.	Solid Geometry.	$4\frac{1}{2}$ -6.	Elementary German.

## Tuesday, June 24, and September 16.

8-9. 9\(\frac{1}{4}-10\)\(\frac{1}{4}\). 10\(\frac{3}{4}-12\)\(\frac{3}{4}\).	Physiography. Chemistry. Elementary Latin.	$\begin{array}{c} 1\frac{1}{2} - 3\frac{1}{2} \\ 4 - 6. \end{array}$	Elementary English $(a)$ . Advanced Latin.
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## Wednesday, June 25, and September 17.

8-9.	Logarithms and Trigonometry.		Elementary History.
$9\frac{1}{4}-10\frac{3}{4}$ .	Elementary Algebra.	$1\frac{1}{2}$ – $3\frac{1}{2}$ .	Advanced French.
		4-6.	Advanced Greek.

## Thursday, June 26, and September 18.

8-9.	Meteorology.	14-34.	Advanced German.
94-114.	Elementary Greek.	4-6.	Advanced History.
111-121.	Advanced Algebra.		

### Friday, June 27, and September 19.

$1\frac{1}{2}-2\frac{1}{2}$ .	Advanced	Physics.	3-6.	English $(b)$ .
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#### Saturday, June 28, and September 20.

94-104.	Astronomy.	$11\frac{3}{4}$ $-12\frac{3}{4}$ .	Anatomy, and Hygier	Physiology
			and myglor	uc.

## SEPTEMBER EXAMINATIONS.

The September Examinations will be held in Cambridge only, on Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, September 15, 16, 17, 18, 19 and 20.

#### EXAMINATIONS IN ENGLISH A, GERMAN A, AND FRENCH A.

In 1902, the examination in English A will be held in accordance with the programme given below. This examination, formerly held in Cambridge only, is now held in June at all the places in which the Harvard College admission examinations are held in 1902.

### FRIDAY, JUNE 27, AND SEPTEMBER 19.

## 3-6 P. M. English A.

This examination is not identical with the examination in English (b).

The examinations in German A and French A correspond to the admission examinations in Elementary German and French, and will be held on Monday, June 23, and Monday, September 15.





Monographs prepared by the students are published and sold by Messrs. Ginn & Company.

Besides the present publication, Radcliffe College issues annually a list of its Courses of Study and an Annual Report. These documents, and also separate pamphlets, published by Harvard University, giving detailed accounts of the work of the principal departments, may be had by addressing

Radcliffe College,
Cambridge, Massachusetts.

1903 Thomas Attle Clark

THE LIBRARY
OF THE

# Madcliffe College

CAMBRIDGE, MASSACHUSETTS

1903

\*\*\* The legal title of the Corporation (to be used in making gifts and bequests) is "RADCLIFFE COLLEGE." It should be described as established in Cambridge, Massachusetts.

Correspondence should be addressed to Radcliffe College, Cambridge, Massachusetts.

The College buildings are open to visitors interested in the work of the College, during both vacations and term-time; though students only are admitted to the class-rooms during the hours of lectures.

The Reference Library is in the Gilman Building.

The Laboratories of Chemistry, Physics, and Botany are in buildings on the grounds.

The Laboratory of Biology occupies quarters in the University Museum on Oxford Street.

The Gymnasium is open to all students without charge.

The Dean and the Secretary may be consulted at Fay House during termtime, and special appointments may be made as required.

The Academic year begins on the Thursday following the last Wednesday in September. In 1903 it is October 1. Students report for registration at 9 A. M. of that day.

The summer vacation begins on the last Tuesday in June, and ends on the last Wednesday in September.

The Christmas recess is from Dec. 23, 1903, to Jan. 2, 1904, inclusive.

The Spring recess is from April 17 to April 23, 1904, inclusive.

## Radcliffe College.

RADCLIFFE COLLEGE, the successor of the Society for the Collegiate Instruction of Women, offers systematic collegiate instruction to women under the professors and other teachers of Harvard University. More than a hundred instructors of the University are teachers in Radcliffe College.

Fay House, 10 Garden Street, contains the offices and some of the recitation rooms. The other recitation-rooms, the library, and the gymnasium are near Fay House. The College has four laboratories, of Physics, Chemistry, Botany, and Biology. The collections of the Museum of Comparative Zoölogy, the Peabody Museum of American Archaeology, the University Museums of Geology, Botany, and Mineralogy, and the Semitic Museum, are also open to the students; and, by vote of the President and Fellows of Harvard College, the students have the use of the University Library, containing 500,000 volumes. Opportunities for study in the Astronomical Observatory, the Botanic Garden, and the Herbarium are also afforded.

The requirements for admission are identical with those for admission to Harvard College. The courses of instruction given in Radcliffe College correspond to both "undergraduate" and "graduate" courses offered by Harvard University, and are more than sufficient to enable a woman to perform the work required by the University for the degrees of A. B. and A. M. In addition to these, Graduate Students in Radcliffe College have access to a large number of Graduate courses in Harvard University. The examinations are the same in both institutions, and the diplomas conferring the degrees of A. B. and A. M. are countersigned by the President of Harvard University as a guarantee that these degrees are equivalent to the corresponding degrees given by the University.

For provisions for the admission of Special Students and Graduate Students, see pages 34, 35, 36, and 37.



Thomas Arkle Clark

## Associates of Radcliffe College.

ELIZABETH CARY AGASSIZ.

EZRA HENRY BAKER, A. B.

WILLIAM ELWOOD BYERLY, PH. D.

ELLA LYMAN CABOT.

MARY COES, A. M.

MARY HUNTINGTON COOKE.

LILIAN HORSFORD FARLOW.

ARTHUR GILMAN, A. M.

STELLA SCOTT GILMAN.

GEORGE LINCOLN GOODALE, M. D., LL. D.

WILLIAM WATSON GOODWIN, PH.D., LL. D., D.C. L.

JOHN CHIPMAN GRAY, LL. D.

HENRY LEE HIGGINSON, A. M.

AGNES IRWIN, LITT. D.

VIRGINIA NEWHALL JOHNSON, A. B.

ALICE MARY LONGFELLOW.

GRACE HARRIET MACURDY, A. B.

ELLEN FRANCIS MASON.

FANNY PEABODY MASON.

JOHN FARWELL MOORS, A. M.

CHARLES ELIOT NORTON, LITT. D., LL. D.

JAMES MILLS PEIRCE, A. M.

CLEMENT LAWRENCE SMITH, A. M., LL. D.

JOSEPH BANGS WARNER, A. M., LL. B.

SARAH WYMAN WHITMAN.

president.

ELIZABETH C. AGASSIZ

Dean.

AGNES IRWIN

Treusurer.

HENRY LEE HIGGINSON

Council.

ELIZABETH C. AGASSIZ, Chairman

AGNES IRWIN

WILLIAM E. BYERLY

Ex-officio.

John Farwell Moors

ALICE MARY LONGFELLOW
WILLIAM WATSON GOODWIN

SARAH WYMAN WHITMAN
CLEMENT LAWRENCE SMITH
LILIAN HORSFORD FARLOW

JOHN CHIPMAN GRAY.

Academic Board.

WILLIAM E. BYERLY, Chairman

ELIZABETH C. AGASSIZ Ex-officio

MINTON WARREN

EDWARD LAURENS MARK

SILAS MARCUS MACVANE

EDWIN HERBERT HALL

HANS CARL GÜNTHER VON JAGEMANN

CHARLES HALL GRANDGENT

GEORGE LYMAN KITTREDGE

Secretary.

MARY COES

Nibrarian.

CAROLINE A. FARLEY

Medical Adviser to the College. HENRY PICKERING WALCOTT, A. B., M. D.

## Standing Committees.

The House Committee in charge of buildings, house-service, grounds, and repairs and additions, Mrs. Whitman, Chairman, Miss Irwin, Mrs. Farlow, Miss Longfellow, Mr. Warner.

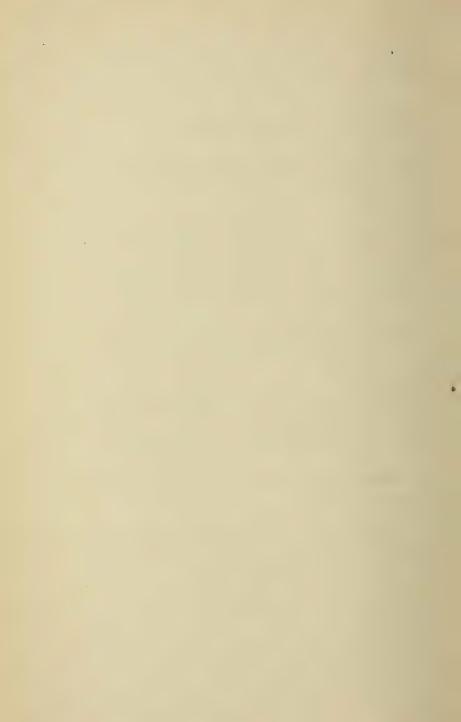
The Students' Committee in charge of the general discipline of the students, oversight of their homes while in Cambridge, and of their amusements, clubs, and social life, Miss Longfellow, Chairman, Miss Irwin, Mrs. Cooke, Miss Coes, Mrs. Johnson, Mrs. Cabot, Miss F. P. Mason.

The Library Committee with general supervision of the Library, Mrs. Farlow, Chairman, Miss Irwin, Professor Goodwin, Miss E. F. Mason.

The Finance Committee in charge of all matters pertaining to Expenditure, Endowment Fund, etc., Professor Gray, Chairman, Mr. Baker, Professor Byerly, Mr. Gilman, Mr. Higginson, Miss Irwin, Mr. Moors, Mr. Warner.

The Committee on the Gymnasium, Mrs. Farlow, Chairman, Miss Irwin, Mrs. Johnson, Miss Longfellow.

The College keeps a list of those students who have received degrees or certificates and wish to find positions as teachers, for the information of school officers and others who may require their services.



# REQUIREMENTS FOR ADMISSION TO RADCLIFFE COLLEGE.

# ADMISSION OF CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS.

The requirements for admission to Radcliffe College are the same as those for admission to Harvard College. Radcliffe College holds no independent entrance examinations, but is authorized to make arrangements by which women can take the Harvard Examinations and have their work submitted to the Harvard Examiners. These examinations may be taken in Cambridge, and in other places in which the Harvard examinations are held in June. The September examinations are held in Cambridge only.

Two examinations of candidates for admission will be held in Cambridge in 1903, in Fay House. The days and hours are given in detail on page forty-seven of this pamphlet.

The academic year begins on Thursday, October 1, 1903. All Students register at the Office on that day at nine A. M.

• Any one expecting to take admission examinations should register for such examinations on a form which may be obtained from the Secretary. When writing for this form she should say whether she is a Preliminary or a Final Candidate. The Registration Blanks of all candidates who wish to take examinations in June should be properly filled out and in the hands of the Secretary by June 10; those of candidates who wish to take examinations in September, by September 10.

Every candidate for admission to Radcliffe College is required to furnish a testimonial of honorable dismissal from the school or college which she has attended, or from the tutor with whom she has studied. She must also refer to two persons from whom information about her may be obtained. References should be sent to the Secretary of the college a month before the examination.

FA fee of five dollars for the whole examination is to be paid by each candidate in June, and again in September if she then presents herself. For this a receipt will be given and the amount will be deducted from the first payment for tuition. The fee will not be returned to a candidate who does not enter college.

#### TERMS OF ADMISSION TO RADCLIFFE COLLEGE.

The studies which may be presented in satisfaction of the requirements for admission to the Freshman Class in Radcliffe College are named together in the following lists. The figure attached to each study indicates the relative weight which will be given to that study in determining the question of the candidate's fitness for admission:

	Elementary	Advanced				
	English (a) or (b) (4)	Greek (2)				
	Greek (4)	Latin (2)				
	Latin (4)	German (2)				
	German (2)	French (2)				
	French (2)					
His (2	$ ag{One of the following two:} \ {egin{array}{l} { m Greek and Roman} \ { m English and American} \end{array}}$	$ \text{History} \left\{ \begin{aligned} &\textit{One of the following four}:\\ &\textit{Ancient}\\ &\textit{English and American}\\ &\textit{of Europe}\\ &\textit{of a period} \end{aligned} \right. $				
	Algebra (2)	Algebra (1)				
	Geometry (3)	Logarithms and Trigo-				
	or	nometry (1)				
	Plane Geometry (2)	Solid Geometry (1)				
		Astronomy (1)				
	Physics (2)	Physics (2)				
	Chemistry (2)	Meteorology (1)				
	Physiography (1)	Counterpoint (2)				
	Anatomy, etc. (1)					
	Harmony (2)					

A candidate for admission must offer from this list studies amounting to 26 points, of which points at least four must be in advanced studies. The studies offered must include:—

9

English							4
One ancient langua	ge (E	lem.	Lati	n or	Ele	m.	
Greek)							4
One modern foreign	langua	age (F	llem.	Geri	nan	or	
Elem. French							2
Elementary History							2
Algebra							2
Geometry or Plane	Geome	etry					3 or 2
Studies amounting	to two	poin	ts fr	om t	he f	ol-	
lowing sciences (	Elem.	Phy	sics,	Cher	nistı	ry,	
Physiography, An	atomy	, etc.					2
							19 or 18

No candidate may offer an advanced study who does not at the same time or earlier offer the corresponding Elementary study; but Physics is considered Elementary with respect to Meteorology, and Geometry or Plane Geometry, with respect to Astronomy.

Candidates who are looking forward to the extended study of English or of any other modern literature are advised to acquire a knowledge of Greek as well as of Latin.

## DEFINITIONS OF REQUIREMENTS.

#### GOOD ENGLISH.

Clear and idiomatic English is expected in all examination papers and note-books written by candidates for admission. Teachers are requested to insist on good English, not only in translations, but in every exercise in which the pupil has occasion to write or to speak English.

## 1. English.

A candidate for admission to Radcliffe College may take either of the examinations, (a) and (b), described below. If she passes (b) she is exempt from the prescribed English of the Freshman year (English A); but if she passes it with Grade D she is required to take before the end of her second year a half-course in English Composition in addition to her regular elective courses.

## (a) Elementary English.

The examination in English will consist of two parts, which, however, cannot be taken separately:—

I. The candidate will be required to write a paragraph or two on each of several topics chosen by her from a considerable number — perhaps ten or fifteen — set before her on the examination paper.

In 1903, 1904, and 1905 the topics will be drawn from the following works: —

Shakspere's Merchant of Venice and Julius Caesar; The Sir Roger de Coverley papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Carlyle's Essay on Burns; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

In 1906 the topics will be drawn from the following works:—

Shakspere's Macbeth and The Merchant of Venice; The Sir Roger de Coverley Papers in the Spectator; Irving's Life of Goldsmith; Coleridge's The Ancient Mariner; Scott's Ivanhoe and The Lady of the Lake; Tennyson's Gareth and Lynette, Lancelot and Elaine, and the Passing of Arthur; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

The candidate is expected to read intelligently *all* the books prescribed. She should read them as she reads other books; she is expected not to know them minutely, but to have freshly in mind their most important parts. In every case the examiner will regard knowledge of the book as less important than ability to write English.

As additional evidence of preparation, the candidate may present an exercise-book, properly certified by her instructor, containing compositions or other written work.

II. A certain number of books will be prescribed for careful study. This part of the examination will be upon subject-matter, literary form, and logical structure, and will also test the candidate's ability to express her knowledge with clearness and accuracy.

The books prescribed for this part of the examination in 1903, 1904 and 1905 are:—

Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

The books prescribed for this part of the examination in 1906 are:

Shakspere's Julius Caesar; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America; Macaulay's Essay on Milton and Life of Johnson.

No candidate will be accepted in English whose work is seriously defective in point of spelling, punctuation, grammar, or division into paragraphs.

In connection with the reading and study of the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry should be committed to memory. The essentials of English grammar should not be neglected in preparatory study.

The English written by a candidate in any of her examination-books may be regarded as part of her examination in English, in case the evidence afforded by the examination-book in English is insufficient. A candidate who has passed this examination in Elementary English with a grade of A or B may take a second examination, which, if passed with a grade of A or B, shall exempt her from the prescription of English A (prescribed Freshman English).

At this second examination, which will be held in September only, a candidate will write one or more compositions on topics to be selected by her from a list comprising subjects in English Literature, the Classics, French and German authors, History and Science. The examination will occupy two hours.

## (b) English.

The examination will consist of questions in Rhetoric,\* questions in Literary History from the time of Shakspere, and compositions — based on the following works:—

Palgrave:
Golden Treasury (First Series)
Shakspere:
Julius Caesar

The Merchant of Venice

Macbeth

Twelfth Night or As You Like

It

King Lear or Hamlet

Milton:

L'Allegro

Il Penseroso

Comus Bunyan:

The Pilgrim's Progress, or

Defoe:

Robinson Crusoe

Dryden:

Alexander's Feast

To the Memory of Mr. Oldham Upon the Death of the Earl of

Dundee

\*A. S. Hill's Principles of Rhetoric is used for the corresponding Study in Radcliffe College, and is recommended for use in preparation for this examination.

Swift:

The Voyage to Lilliput

Addison and Steele:

The Sir Roger de Coverley Papers

Pope:

Epistle to Arbuthnot

Goldsmith:

The Vicar of Wakefield The Deserted Village

Scott:

The Lady of the Lake

Ivanhoe

Quentin Durward

Macaulav:

Life of Johnson

Lays of Ancient Rome

Byron:

Mazeppa

The Prisoner of Chillon

Irving:

The Legend of Sleepy Hollow

Rip Van Winkle Tales of a Traveller

Thackeray:

Henry Esmond

Dickens:

A Tale of Two Cities, or

David Copperfield

Browning: Selections, for example,

Cavalier Tunes

The Lost Leader

How They Brought the Good News from Ghent to Aix

Evelyn Hope

Home Thoughts, from Abroad

Home Thoughts, from the Sea

Incident of the French Camp

The Boy and the Angel

One Word More

Hervé Riel

Pheidippides

Tennyson: Selections, for example,

Enid

Elaine

The Passing of Arthur

The Lady of Shalott

The Lotus Eaters

Ulysses

Tithonus

The Revenge

Franklin:

Autobiography

Hawthorne:

The House of the Seven Gables

Longfellow:

Tales of a Wayside Inn

Lowell:

The Vision of Sir Launfal

The candidate is expected to read all the books prescribed.\* She should read them as she reads other books, not trying to remember them in detail, but regarding each work as a whole and giving it such appreciation as shall enable her to write about it intelligently. In every case the examiner will regard knowledge of the books as less important than ability to write English; if the examination book in English affords insufficient

<sup>\*</sup> In connection with the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry committed to memory.

evidence, he will examine the written work of the candidate in other subjects.

No candidate will be accepted in English whose work is seriously faulty in spelling, grammar, punctuation, or division into paragraphs.

Preparation for the examination should occupy at least three school hours, or periods, a week for four years. Throughout the course frequent short compositions should be required as well as occasional long ones. Topics should be chosen by the pupil herself whenever that is possible; and the topics assigned by the instructor should be within the range of the pupil's knowledge and sympathies, and should be such as to awaken interest and stimulate intelligence. Criticism should be constant and thorough; it should take account of merits as well as of faults, and should never interfere with the honest expression of opinion or with the free play of individuality in thought and expression. Mechanical methods of every kind should be avoided; and attention should be fixed on principles rather than rules.

As to the right way of studying Rhetoric, attention is called to the following extract from the Report of the Vassar Conference:\*

"Though it is clear that the power to write a language can be obtained only by unremitting practice, yet, in the opinion of the Conference, such practice may properly be accompanied and illustrated by a course in elementary rhetoric. This course should include not only the principles of clearness, force, and good taste, but the principles of the arrangement of clauses in the sentence and of sentences in the paragraph. The teacher should bear in mind that any body of written English, of whatever length, is an organic unit, with principles that apply as well to the arrangement of the minor elements as to the grouping of the larger divisions of essay or book. Especial care should be taken that rhetoric is not studied by itself or for its own sake. Its connection with the pupil's actual written or spoken exercises should be kept constantly in view."

In 1903 the examination will be held on Friday, June 26th, at all the places where other examinations for admission are held and on Friday, September 25th, at Cambridge only. It will occupy three hours beginning at 3 p. m.

After 1903 the examination for the anticipation of English A (p. 33) will be withdrawn.

<sup>\*</sup> Report of the Committee of Ten, page 95, section 8.

#### 2. 3. Greek.

## 2. Elementary Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least two school years. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of simple Attic prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) A thorough examination on a prescribed portion of Xenophon (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Attic prose, involving the use of such words, constructions and idioms only as occur in the portion of Xenophon prescribed.

The portion of Xenophon prescribed for this examination is the second book of the Anabasis. Two year's notice will be given of any change in the selection.

#### 3. Advanced Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least *three* school years. The second part of the examination (Greek Composition) is optional, and may be omitted without loss of credit:—

- (a) The translation at sight of Attic prose and of Homer, with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into Attic prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Greek prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

<sup>\*</sup>The pages of the more recent Teubner text editions are taken as a standard in this statement.

The estimate of the periods of study necessary to prepare for the elementary and advanced examinations in Greek is based on the assumption that the candidate has begun the study of Latin at least a year earlier, and has continued it along with her Greek course; otherwise the periods specified would not be sufficient.

In preparation for the elementary examination in Greek, candidates should read from 130 to 170 pages \* of Attic prose. For the advanced examination candidates should read from 30 to 50 pages more of Attic prose, and from 3000 to 5000 verses of Homer. The reading of Homer may be advantageously begun with a thorough study of Iliad, Books I and II (to the catalogue of ships).

The pupil should be constantly guided in proper methods of reading, and trained to read the Greek intelligently, as Greek, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Greek, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Greek Composition, pupils should be trained, from an early stage of the preparatory course, to render into Greek, not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

#### 4, 5. Latin.

## 4. Elementary Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *three* school years. The two parts of the examination cannot be taken separately:—

(a). The translation at sight of simple Latin prose and verse. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) A thorough examination on a prescribed portion of Cicero's speeches (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose, involving the use of such words, constructions, and idioms only as occur in the speeches prescribed.

The portion of Cicero prescribed for this examination is the second, third, and fourth speeches against Catiline. Two years' notice will be given of any change in the selection.

#### 5. Advanced Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *four* school years. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of Latin prose and verse with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into Latin prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the examinations in Latin is made with reference to schools which have a four years' course. Schools which have a five years' course may more advantageously provide for beginning the study of Latin in the first year, with some diminution, if necessary, of the time devoted to it in the last years of the course.

The course of reading pursued in preparation for the examinations in Latin should include:—

- (a) Easy reading, included in or following a suitable introductory book ('Latin Lessons'), amounting to from 30 to 40 pages;\*
  - (b) Nepos (Lives) and Caesar (Gallic War), 90 to 120 pages;
  - (c) Cicero, 90 to 120 pages, including the four speeches against Catiline

and the speech on the Manilian Law, with additional speeches selected by the teacher;

(d) Virgil and Ovid, 6000 to 10,000 verses, including the first six books of the Aeneid.

Preparation for the elementary examination alone should include (a) and (b), the four speeches against Catiline, and from 2000 to 3000 verses of Virgil, or of Ovid and Virgil.

The pupil should be constantly guided in proper methods of reading, and trained to read the Latin intelligently, as Latin, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of Grammar, with some practice in writing Latin, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Latin Composition, pupils should be trained, from an early stage of the preparatory course, to render into Latin not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

## 6, 7. German.

## 6. Elementary German.

- (a) The translation at sight of simple German prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of simple English sentences, or of easy connected prose, to test the candidate's familiarity with elementary grammar.

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than two hundred pages of easy German (including reading at sight in class).

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugation of the weak and the more usual strong verbs; the declension of articles, adjectives, pronouns, and such nouns as are readily classified; the

commoner prepositions; the simpler uses of the modal auxiliaries; the elements of syntax, especially the rules governing the order of words.

Pronunciation should be carefully taught, and the pupils should have frequent opportunities to hear German spoken or read aloud. The writing of German from dictation is recommended as a useful exercise.

#### 7. Advanced German.

- (a) The translation at sight of ordinary German. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of those who have read, in addition to the amount specified under Elementary German, not less than five hundred pages of classical and contemporary prose and verse. It is recommended that the reading be selected from such works as the following: Riehl, Culturgeschichtliche Novellen; Freytag, Bilder aus der deutschen Vergangenheit, Die Journalisten; Kohlrausch, Das Jahr 1813; Schiller, Der dreissigjührige Krieg, Wilhelm Tell, Maria Stuart, Die Jungfrau von Orleans; Goethe, Hermann und Dorothea, Egmont, Iphigenie; Lessing, Minna von Barnhelm. About one half of the amount read should be Nineteenth Century prose.

In the translation into German candidates will be expected to show a thorough knowledge of accidence, the elements of word-formation, the principal uses of prepositions and conjunctions and the essentials of syntax especially the uses of the modal auxiliaries, and of the subjunctive and infinitive modes.

It is recommended that the candidate be trained to follow a recitation conducted in German and to answer in that language questions asked by the instructor.

#### 8, 9. French.

## 8. Elementary French.

- (a) The translation at sight of ordinary Nineteenth Century prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of simple English sentences or of easy connected prose, to test the candidate's familiarity with elementary gram-

mar. Proficiency in grammar may also be tested by direct questions, based on the passages set for translation under (a).

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than four hundred pages (including reading at sight in class) from the works of at least three different authors. It is desirable that a portion of the reading should be from works other than works of fiction.

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugations of regular verbs, of the more frequent irregular verbs, such as aller, envoyer, tenir, pouvoir, voir, vouloir, dire, savoir, faire, and those belonging to the classes represented by ouvrir, dormir, connaître, conduire, and craindre; the forms and positions of personal pronouns and of possessive, demonstrative, and interrogative adjectives; the inflection of nouns and adjectives for gender and number, except rare cases; the uses of articles, and the partitive constructions.

Pronunciation should be carefully taught, and pupils should have frequent opportunities to hear French spoken or read aloud. The writing of French from dictation is recommended as a useful exercise.

#### 9. Advanced French.

- (a) The translation at sight of standard French. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of candidates who have read, in addition to the amount specified under elementary French, not less than six hundred pages of prose and verse from the writings of at least four standard authors. A considerable part of the amount read should be carefully translated into idiomatic English.

Candidates will be expected to show a thorough knowledge of accidence and familiarity with the essentials of French syntax, especially the uses of tenses, modes, prepositions and conjunctions.

It is recommended that the candidate be trained to follow a recitation conducted in French and to answer in that language questions asked by the instructor.

## 10, 11. History (including Historical Geography).

## 10. Elementary History.

Either of the two following groups, each including two fields of historical study:—

- 1. Greek and Roman History.—(a) Greek History to the death of Alexander, with due reference to Greek life, literature, and art. (b) Roman History to the accession of Commodus, with due reference to literature and government.
- 2. English and American History. (a) English History, with due reference to social and political development. (b) American History, with the elements of Civil Government.

For preparation in each of the two historical fields presented, a course of study equivalent to at least three lessons a week for one year will be necessary.

The candidate will be expected to show on examination such general knowledge of each field as may be acquired from the study of an accurate text-book of not less than 300 pages, supplemented by suitable parallel readings amounting to not less than 500 pages. The examination will call for comparison of historical characters, periods, and events, and in general for the exercise of judgment as well as of memory. Geographical knowledge will be tested by means of an outline map.

In the judgment of the Department of History it is desirable that Greek and Roman History be offered as a part of the preparation of every candidate.

## 11. Advanced History.

Any one of the four courses of study which follow: -

- 1. Greek History to the destruction of Corinth and Roman History to the death of Constantine (open to those candidates only who have offered English and American History as an elementary study).
- 2. English History and American History (open to those candidates only who have offered Greek and Roman History as an elementary study).
- 3. European History from the Germanic conquests to the beginning of the Seventeenth Century.
  - 4. A year's study of any one of the four historical fields defined under

Elementary History and not already offered by the candidate, together with a year's detailed study of a limited period within that field, selected with the approval of the Department of History.\*

The examination in the second part of 4 will be especially adapted to the particular period selected and will be held in Cambridge only.

In every case the candidate will be expected to show on examination such an acquaintance with the whole field as may be gained from the study of good text-books, together with substantial parallel readings, and, further, such a detailed knowledge of some part of the field as may be gained from suitable topical study. A higher standard of acquirement and of power to combine results will be expected than in the elementary requirement.

As further evidence of the candidate's proficiency satisfactory written work, done at school and certified by the teacher, must be submitted at the time of the examination. It must be presented in the form of a notebook (or bound collection of notes), containing not less than 50 written pages on each historical field offered, and must show practice in some of the following exercises:—

- (a) Notes and digests of the pupil's reading outside of the text-books.
- (b) Brief written tests requiring the application to new questions of knowledge previously acquired.
  - (c) Parallels between historical characters or periods.
- (d) Short studies of topics limited in scope, prepared outside of the classroom and illustrated by some reference to contemporary material.
- (e) Historical maps or charts showing explorations, migrations, conquests, territorial changes, or social conditions.

#### 12-15. Mathematics.

A thorough practical acquaintance with ordinary Arithmetic is assumed as underlying all preparation in Mathematics. Knowledge of the fundamental principles of Arithmetic and careful training in accurate computation with whole numbers and with vulgar and decimal fractions form an essential part of early school work. But the pupil's time should not be wasted in the solution by arithmetic of puzzling problems which properly belong to algebra, or in complicated and useless reductions, or in the details of commercial arithmetic. It is desirable that some familiarity with alge-

<sup>\*</sup> For example, the Spartan and Theban supremacies, the Period of the Punic wars, the Stuart Period, the transition from the American colonial to the federal system.

braic expressions and symbols, including the methods of solving simple equations, be acquired in connection with the course in Arithmetic.

## Elementary Mathematics.

12. Elementary Algebra.—Algebra, through Quadratic Equations. The requirement in Algebra includes the following subjects: factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem for positive integral powers of the binomial, and the extraction of roots; arithmetical and geometrical progressions; putting questions into equations and the reduction of equations; the ordinary methods of elimination and the solution of both numerical and literal equations of the first and second degrees with one or more unknown quantities and of problems leading to such equations.

The student should cover carefully the whole ground here specified, and should acquire a thorough understanding not only of the practice, but of the reasons involved in the elementary algebraic rules; for example, in the rules of multiplication, of signs, and of exponents, in the rules for fractions, and in those relating to the reduction and solution of equations. She should train herself to practical skill by the solution of a large number of examples, and should learn to do her work with reasonable quickness, as well as with confidence, accuracy, and clearness. The solution of fairly complicated literal quadratics, the various methods of elimination for equations of the first two degrees, the putting of problems in a neat manner into equations, and the working of the various algebraic operations both for integral and fractional expressions may be mentioned as important subjects of attention. The student should be taught to arrange her work in a clear, orderly, and compact fashion.

The time supposed to be devoted to the systematic study of the requirement in Algebra is the equivalent of a course of three lessons a week through two school years.

13. Geometry.—Plane and Solid Geometry, including problems in mensuration of plane and solid figures, and original propositions in Plane Geometry.

Geometric education should begin in the kindergarten or primary school, where the child should acquire familiarity through the senses with simple

geometric forms, by inspecting, drawing, modelling, and measuring them, and noting their more obvious relations. This study should be followed, in the grammar school, by systematic instruction in Concrete (or Observational) Geometry, of which geometric drawing should form a part. Such instruction should include the main facts of Plane and Solid Geometry, treated as matters of observation, and not as exercises in logical deduction, without however necessarily excluding the beginnings of deductive proof as soon as the pupil is ready for them. Concrete Geometry is believed to have important educational value, and to prepare an excellent foundation for the later study of Formal Geometry. It belongs, however, to the earlier stages of school work, and should not be postponed until the time that belongs to direct preparation for college or the scientific school.

In teaching Formal Geometry, stress should be laid from the outset on accuracy of statement and elegance of form, as well as on clear and strict reasoning. As soon as the pupil has begun to acquire the art of rigorous demonstration, her work should cease to be merely receptive, she should be trained to devise constructions and demonstrations for herself, and this training should be carried through the whole of the work in Plane Geometry. Teachers are advised, in their selection of a text-book, to choose one having a clear tendency to call out the pupil's own powers of thought, prevent the formation of mechanical habits of study, and encourage the concentration of mind which it is a part of the discipline of mathematical study to foster. The subject of Geometry, not a particular treatise, is what the pupil should be set to learn; and its simpler methods and conceptions should be made a part of her habitual and instinctive thought. Lastly, the pupil should be stimulated to good work by interest in the study felt and exhibited by the teacher.

The requirement in Geometry embraces the following topics: the general properties of plane rectilinear figures; the circle and the measure of angles; similar polygons; areas; regular polygons, and the measure of the circle; the relations of planes and lines in space; the properties and measure of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle. The propositions required under these several heads are those only which are contained in the older treatises, and which are recognized as constituting the Elements of Geometry. The examination does not include the additions introduced into some recent text-books, although most of those additions are in themselves valuable for the student who has time and taste for extra study in this field. A syllabus of the required propositions has been prepared. [This syllabus may be obtained, price 10 cents, at the Publication Office, 2 University Hall, Cambridge.]

The examination in Geometry also includes original propositions in Plane Geometry, based on the propositions named in the syllabus, and problems in mensuration in both Plane and Solid Geometry; but excellence in bookwork and in exercises immediately illustrating bookwork will be allowed to offset in part any lack of skill in original work.

The time which it is recommended to assign to the systematic study of the requirement in Formal Geometry is the equivalent of a course of five lessons a week for one school year; but it is believed to be advisable to extend this allowance of time over two years.

## 13a. Plane Geometry.

The requirement in Plane Geometry is stated on pages 1-14 of the Syllabus mentioned above.

#### Advanced Mathematics.

- 13b. Solid Geometry.—Chauvenet's Geometry, Revised and Abridged (Philadelphia: J. B. Lippincott & Co.), Books VI, VII, VIII, and IX, will serve to indicate the nature and amount of the requirement in Solid Geometry.
- 14. Logarithms and Trigonometry.—The theory of logarithms and the use of logarithmic tables.—Plane trigonometry.—The solution of the right spherical triangle.—Applications to simple problems.

No technical knowledge of the subjects of surveying and navigation, such, for instance, as the methods of parallel or middle latitude sailing, will be required, but such terms as latitude, longitude, angle of elevation or depression, bearing, etc., should be understood. At the examination, candidates are furnished with four-place tables belonging to the University, and are not allowed to use their own tables. The tables provided are distributed before the hour of examination, so that candidates may have at least an hour for becoming acquainted with their arrangement and use. Teachers who wish a still earlier opportunity of seeing these tables should write to the Secretary of Radcliffe College.

## 15. Advanced Algebra.

The requirement in Advanced Algebra includes the following subjects;

(a) Simultaneous quadratics and equations solved like quadratics; properties of quadratic equations; addition, subtraction, multiplication and

division of complex quantities; inequalities; variations; arithmetical and geometrical progressions; mathematical induction; simple problems in choice and chance; continued fractions; scales of notation.

(b) Determinants, not including the multiplication theorem; simple applications of determinants to linear equations; the solution of numerical equations of higher degree, and so much of the theory of equations (not including multiple roots or Sturm's theorem) as is necessary for this purpose.

The topics included under (a) may be treated briefly. About half the time devoted to the requirements should be spent on the topics included under (b).

## 16-22. Physical Science.\*

#### Elementary Physical Science.

16. Elementary Physics.—A course of study dealing with the leading elementary facts and principles of physics, with quantitative laboratory work by the pupil.

The instruction given in this course should include qualitative lecture-room experiments, and should direct especial attention to the illustrations and applications of physical laws to be found in every-day life. The candidate is required to pass a written examination, the main object of which will be to determine how much she has profited by such instruction. This examination may include numerical problems. It will contain more questions than any one candidate is expected to answer, in order to make allowance for a considerable diversity of instruction in different schools.

The pupil's laboratory work should give practice in the observation and explanation of physical phenomena, some familiarity with methods of measurement, and some training of the hand and the eye in the direction of precision and skill. It should also be regarded as a means of fixing in the mind of the pupil a considerable variety of facts and principles. The candidate is required to pass a laboratory examination, the main object of which will be to determine how much she has profited by such a laboratory course.

The candidate must name as the basis for her laboratory examination at

<sup>\*</sup>For rules relating to the time of handing in note-books and to candidates examined in June in places where no laboratory examination is provided, see p. 30.

least thirty-five exercises selected from a list of about sixty, described in a publication issued by Harvard University under the title, "Descriptive List of Elementary Exercises in Physics." [This list may be obtained, price 40 cents, at the Publication Office, 2 University Hall, Cambridge.] In this list the divisions are mechanics (including hydrostatics), light, heat, sound, and electricity (with magnetism). At least ten of the exercises selected must be in mechanics. Any one of the four other divisions may be omitted altogether, but each of the three remaining divisions must be represented by at least three exercises.

The candidate is required to present a note-book in which she has recorded the steps and the results of her laboratory exercises, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes. These exercises need not be the same as those upon which the candidate presents herself for the laboratory examination, but should be equivalent to them in amount and grade of quantitative work.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in physics. Experience has shown that pupils can make the original record of their observations entirely presentable, so that copying will be unnecessary, and they should in general be required to do so.

This course, if taken in the last year of the candidate's preparation, is expected to occupy in laboratory work, recitations, and lectures, five of the ordinary school periods, about fifty minutes in length, per week for the whole year. With few exceptions exercises like those in the Descriptive List already mentioned can be performed in a single school period, but for satisfactory results it will often be necessary to repeat an exercise. Two periods per week for the year should be sufficient for the laboratory work proper. If the course is begun much earlier than the last year of the candidate's preparation, as it well may be, it will require more time.

17. Chemistry.\*—A course of at least sixty experiments, performed at school by the pupil and accompanied with systematic instruction in principles and their applications, in accordance with directions given in a pam-

<sup>\*</sup>The course will be mainly an experimental course in theoretical chemistry, but there will be experiments covering all branches of pure chemistry.

phlet entitled "An Outline of Requirements in Chemistry," issued by Harvard University for the use of teachers only.

The candidate is required to pass both a written and a laboratory examination. The written examination will test her acquaintance with the facts and principles of Chemistry. The laboratory examination will test both her skill in performing experiments and her grasp of the principles involved in them. The candidate is further required to present the original note-book in which she recorded the steps and results of the experiments which she performed at school, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in Chemistry.

**18.** Physiography.— A course of study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Physiography," issued by Harvard University.

For the form of examination see note under Astronomy, below.

19. Anatomy, Physiology, and Hygiene.—A course of study and laboratory work equivalent to that described in a pamphlet entitled "An Outline of Requirements in Anatomy, Physiology, and Hygiene," issued by Harvard University.

The candidate will be required to pass both a written and a laboratory examination. The written examination will test the range and thoroughness of her knowledge of the elements of Anatomy, Physiology, and Hygiene. The laboratory examination will test (a) her ability to perform the experiments described in the Outline of Requirements, and (b) her knowledge of the first aids to be rendered to the injured.

At the time of the laboratory examination the candidate must present the original note-book containing (with dates) the notes and drawings she has made in the course of her laboratory work, and bearing the endorsement of her teacher, certifying that the book is a true record of the pupil's own observations and experiments. An index of subjects should be appended.

## Advanced Physical Science.

#### 20. Advanced Physics.\*

The University does not prescribe the experiments to be performed by those offering this subject for admission. The work should, however, be of advanced grade, almost wholly quantitative, and conducted with apparatus, not necessarily elaborate, yet capable, if carefully handled, of yielding results of such accuracy as to warrant the consideration of somewhat minute error. For example, the balance used in weighing should be so delicate as to justify corrections for the buoyancy of the air on the weights and on the body weighed, and, in the determination of specific gravity, for the temperature of the water. The results should be discussed with reference to their precision and to the number of significant figures. There should be about sixty experiments well distributed through the range of general physics. If the student has devoted a considerable amount of time in the elementary course to experiments in heat, that division of physics may be here omitted. The laboratory work can be performed properly only in periods of considerable length, two to four hours, for example.

Instruction by lectures or text-books and work in problems should be a part of the course.

The candidate will be required to pass both a laboratory and a written examination. She should so thoroughly understand the work which she has performed as not to be confused in the laboratory examination by unfamiliar forms of apparatus.

The laboratory note-book will receive careful attention at the time of the examination. It must contain a certificate from the teacher that it is a true record of the candidate's work.

21. Meteorology.—A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Meteorology," issued by Harvard University.

This course requires a knowledge of Elementary Physics. (For the form of examination see under Astronomy, below.)

**22**. Astronomy.— A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Astronomy," issued by Harvard University.

This course requires a knowledge of Geometry.

<sup>\*</sup>Equivalent to, but not necessarily identical with, Physics C.

In Physiography, Meteorology, and Astronomy, the candidate will be required to take both a written and a laboratory or practical examination. The written examination may test her understanding of observational methods appropriate to the subject, but will call chiefly for a knowledge of facts and principles. The laboratory or practical examination will test her skill in observation as well as her grasp of principles. This examination can be taken in Cambridge only; for those who are examined elsewhere in June, it will be postponed to September.

The laboratory examination in Physiography may include the description, explanation, and comparison of geographical features shown in photographs, maps and models. The laboratory examination in Meteorology may include the use of instruments, the discussion of observations, and the construction and interpretation of weather maps and climatic charts. The practical examination in Astronomy may call for an ability to make simple nakedeye and instrumental observations, and to establish the simpler generalizations of astronomy by discussion of these observations.

The candidate in these subjects will be required to present, at the time of the laboratory or practical examination, the original note-book in which she recorded, with dates, the steps and results of the observations which she made at school. This book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. An index of subjects should be appended. The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible fecord of her work through an extended course of observational study, and that her work has been of a satisfactory character; but greater weight will be given to the practical or laboratory examination than to the note-book in determining the candidate's attainments.

#### 23. Music (Harmony).

The examination will be adapted to the proficiency of those who have studied Harmony in a systematic course of three lessons a week through one school year. In this study some training in pianoforte playing, and the ability to read chorals and moderately easy piano pieces at sight are necessary. This course is equivalent to Music 1. The work will consist chiefly of exercises written on figured basses in which all the triads and seventh-chords are to be employed progressively. Exercises must be written in a clear and well-formed notation. The course will embrace:

1. Notation; Clefs; Signatures; Diatonic and Chromatic Intervals

and their inversions; Consonance and Dissonance; Major and Minor diatonic scales; Chromatic Scale; Natural Harmonic Series.

- 2. Triads of the Major and Minor modes.
- 3. Rules of Chord-connection; Range of voices; Open and Close harmony.
- 4. Inversions of Triads; Principles of doubling voices in chords, especially in successive Sixth-chords.
- 5. Chords of the Dominant Seventh, Dominant Ninth, and Diminished Seventh; Preparation and Resolution.
  - 6. Secondary Seventh-chords; Altered Chords.
  - 7. Suspensions.
  - 8. Passing and Changing notes; Pedal Point.
  - 9. Principles of key-relationship; Simple modulation.
  - 10. Harmonization of simple melodies.

The following text-books on Harmony are recommended: Shepherd, Boise, and Jadassohn.

#### (Counterpoint).

The examination will be adapted to the proficiency of those who have studied Counterpoint in a systematic course of three lessons a week through one school year, and presupposes training in pianoforte playing. As Counterpoint applies the principles of harmony to the melodious treatment of the several voice-parts in combination, and as the art of musical composition begins properly with this study, the work should consist principally of written exercises on given themes, in the following order:—Chorals and melodies harmonized, with a free use of passing notes; the several orders of Counterpoint in two, three, and four voices, with and without cantus firmus; Double Counterpoint; Free Imitative Counterpoint; Analysis of the Two-part Inventions of Sebastian Bach; simple forms of free composition, Organ Preludes, Two-part inventions, and part songs.

Students should use as models simple organ compositions and part-songs of modern composers. For the exercises in the Counterpoint the alto and tenor clefs should be used.

#### LABORATORY EXAMINATIONS.

A candidate who is examined in any study in which a laboratory examination is held will hand in her laboratory note-book at the hour of the laboratory examination. Laboratory note-books will be deposited, after

examination, in the Secretary's office, where they will be kept for a reasonable time, subject to the order of the owners.

A candidate examined in June at any place where a laboratory examination is not provided will be required to take such an examination in Cambridge in the autumn; but if she passes the written examination in June and presents a satisfactory note-book, the subject will be temporarily counted in her favor in determining the question of her admission to College. Similarly a Preliminary candidate is allowed to postpone her laboratory examination, until September of the year in which she enters College.

#### EXAMINATION PAPERS.

A set of recent examination papers will be sent free to any address, on application to the Secretary.

#### DIVISION OF THE EXAMINATION.

A candidate for admission may take the entire examination at one time, or she may divide it under conditions named below, (1) between two years, or (2) between June and September of the same year. If she divides it between two years she is known in the first year as a "Preliminary Candidate"; if between June and September of the same year, she is called a "Postponing Candidate." A Preliminary Examination is always taken a year or more before the Final Examination. Postponing candidates whether in September or in June, are taking Final Examinations. With the approval of the principal or (in case the candidate has attended no school in the year preceding her Final Examination) with the approval of a responsible tutor, a candidate holding a Preliminary Certificate may divide her Final Examination between June and September.

In each study numbered in bold-faced type (1, 2, 3, etc.) there is one examination which cannot be divided.

#### PRELIMINARY EXAMINATIONS.

A candidate may pass a Preliminary Examination in some of the studies, and be examined in the remaining studies in some subsequent year. For the Preliminary Examination the candidate must present herself in June, having previously sent in a certificate of preparation.

A Preliminary certificate will be granted to any candidate who passes the examination in studies rated in the aggregate at eight points.

Candidates may offer themselves for the Preliminary Examination in any studies, elementary or advanced, in which their teachers certify that they are prepared, and in no others.

#### OPTIONAL EXAMINATIONS. ANTICIPATION OF COLLEGE STUDIES.

In addition to the examinations required for admission to Radeliffe College, optional examinations are provided for such candidates as have extended their studies beyond the requirements.

- I. A candidate may present herself for examination in any of the Studies not offered by her for admission, and thus qualify herself to pursue more advanced courses in those subjects in College.
- II. A candidate may present herself for additional examination in one or more of the following studies: (a) any prescribed course or courses of the Freshman year; (b) any elective course or courses intended primarily for undergraduates, provided the courses are of such a character that they may properly be anticipated by examination (see p. 33).

Studies anticipated may be counted toward the degree of Bachelor of Arts in the manner herein provided; but the grade of scholarship attained in an anticipated study is not counted toward distinction or honorable mention with the degree:—

- (1) If the studies anticipated amount to one half of the work of the Freshman year, the student may, upon application, be admitted to the Sophomore class, subject to the condition of making up the deficiency in her Freshman Studies.
- (2) In any case, the studies anticipated shall be placed to the student's credit, and may be used towards satisfying the requirements for the degree of Bachelor of Arts, in either of the following ways:—
- (a) The student may obtain leave from the Academic Board to fulfil the requirements for the degree in three years by taking additional elective studies.
- (b) The student may obtain leave from the Academic Board to reduce the number of courses required in the Senior year, or in the Senior and Junior years, by the amount of the studies anticipated.

Applications under (a) and (b) will not ordinarily be acted upon until the close of the student's first year; and the decision upon them will depend upon the quality of the student's record both in her examination for admission, and in her college work.

#### ANTICIPATION OF PRESCRIBED ENGLISH. (ENGLISH A.)

The examination of candidates who anticipate the English of the Freshman year is as follows\*:—

Composition: A. S. Hill's Principles of Rhetoric (edition of 1895); Practice in Writing. — Literature: Swift's Battle of the Books and Gulliver's Travels; Defoe's Robinson Crusoe (Part I); The Sir Roger de Coverley Papers in the Spectator; Pope's Rape of the Lock, Epistle to Arbuthnot, and Iliad I, VI, XXII; The lives of Swift, Defoe, and Pope in the English Men of Letters Series; Thackeray's English Humorists and Henry Esmond. (This examination will be withdrawn after 1903.)

For another method of anticipating Prescribed Freshman English (English A), see page 11.

#### ADMISSION TO ADVANCED STANDING.

Students may be admitted to advanced standing either (I.) by examination, or (II.) from other colleges without complete examination.

- I. BY EXAMINATION. A candidate may be admitted to the Sophomore, Junior, or Senior Class, if she appear on examination to be versed in the following studies:—
  - 1. The studies required for admission to the Freshman Class (pp. 9-30).
- 2. All the prescribed studies already pursued by the class for which she offers herself, and as many elective studies as she would have pursued if she had entered at the beginning of the course.

Examinations for advanced standing are held in such courses only as are intended primarily for undergraduates; and, among these, in such only as may reasonably be anticipated by examination. No laboratory course, no course in composition or discussion, and no other course in which an examination is obviously an inadequate test may be offered for admission to advanced standing.

A candidate may be admitted in spite of deficiencies in some of these studies; but no candidate so admitted is recommended for the degree until

<sup>\*</sup> Elective courses in English are open, on the same terms as to Sophomores, to students who have anticipated the prescribed English of the Freshman year.

she has made good her deficiencies to the satisfaction of the Academic Board.

Candidates for admission to advanced standing may divide the examination between June and September; but a candidate who fails in any subject in June will not be examined again in that subject in September.

For the times and the places of examinations, see pages 47, 48, 49.

The Secretary must receive, not later than September 10, a written notice specifying the elective course or courses in which the candidate wishes to be examined.

II. WITHOUT COMPLETE EXAMINATION. Graduates of other colleges and students who have completed creditably the work of the first two years at other colleges may be admitted without examination, and assigned to those classes for which their previous training seems to qualify them. Every case is decided on its own merits; but students from other colleges are not admitted ad eundem without examination.

Applications are acted upon at any season of the year. Every person wishing to enter Radcliffe College under this provision must make a complete written statement of the work on which she bases her application. In this she should state how old she is; at what school or schools she received her preparatory training; how long she attended each school; what she studied; how much time she gave to each of the more important studies; and how far she advanced in each before she entered college.

Blank forms of application for admission to advanced standing without complete examination may be obtained from the Secretary.

Much importance is attached to the quality of the work offered. The applicant is expected to furnish (1) official statements of her rank or grade in her various college studies; (2) letters, or other evidence, showing the opinion her instructors have formed of her character and scholarship, (3) a letter of honorable dismissal from the college whence she comes.

Candidates from other colleges may be admitted to Radcliffe College in spite of some deficiencies in their work, on condition that they shall make good these deficiencies before receiving a degree. Deficiency in one direction may be offset by unusual attainments in another.

#### SPECIAL STUDENTS.

Applicants who pass a satisfactory examination on a smaller number of subjects than are called for in the full Requirements may be admitted, at the discretion of the Academic Board, to such special courses as they seem qualified to pursue.

Students of mature age, who wish to pursue chiefly higher courses of study, may be admitted, at the discretion of the Academic Board, without passing the examination for admission, provided that they satisfy the instructors in the courses which they elect of their fitness to pursue them.

All special students are expected to take four courses of study.

Special students may, on application, receive certificates at the end of their term of study, stating the courses in which they have passed satisfactory examinations, and giving the grade to which they have been assigned in each course.

Special students should make application before the first day of September.

#### STUDENTS AND EXAMINATIONS.

Undergraduates are expected to make their choice of elective studies before the first day of September, and no changes are allowed after October 1, except by leave of the Academic Board. Applications for changes must be made to the Academic Board in writing, with a statement of reasons,

The student's choice is limited to those studies which her previous training qualifies her to pursue; and she must observe any restrictions that may be attached to the particular courses she wishes to select. She is further required to avoid any conflict of recitation hours or of examinations between her courses.

No starred (\*) course may be chosen without the *previous* consent of the Instructor. Application should be made, if possible, before the summer vacation.

An undergraduate who wishes to take a Graduate course is required to consult the Instructor in advance; if possible she should do this before the summer vacation. She will be admitted to the course on the recommendation of the Instructor, which must be given in writing.

Not more than one Course of Research may be taken in any year by an undergraduate.

All students are expected to attend all the exercises and to pass all the examinations in the courses which they elect, unless excused by special vote of the Academic Board. Applications for excuses must be made to the Secretary in writing with the reasons.

#### LODGINGS FOR STUDENTS.

Students may learn of lodging-places approved by the Student's Committee by enquiring of the Dean. The ladies of the Standing Committees will be glad to assist students by their advice, whenever it is necessary.

Bertram Hall, the first hall of residence in Radcliffe College, was opened in 1901. It provides accommodations for twenty-five students and is under the charge of a resident mistress, Miss E. M. Hoppin. The hall is situated on Shepard Street, seven minutes walk from Radcliffe College. The price of board is \$6.00 a week for the 36 weeks from the last Wednesday in September to the day before Radcliffe Class Day, exclusive of the Christmas and the Spring recess, as fixed by the college catalogue. Students may remain until the day after Radcliffe Commencement on payment of \$6.00 for the week's board. The charge for rooms is from \$100. up. These charges include all expenses of furnishing, service, heating and light, except open fires and washing. Applications for rooms in Bertram Hall must be sent before May 15 to the Dean of Radcliffe College.

All arrangements for boarding and lodging are to be subject to the approval of the Dean, and the Secretary must be kept constantly informed of the address of every student.

#### GRADUATE STUDENTS.

#### Admission.

Bachelors of Arts of Radcliffe College, and Graduates of other Colleges of good standing who present satisfactory evidence of character and qualifications, are admitted without examination as Graduate Students in Radcliffe College.

An application for admission may be made by filling out and depositing a registration blank at the office. If the applicant is not a graduate of Radcliffe College, she must also file, for the consideration of the Academic Board, satisfactory certificates of scholarship and character; and if she holds a degree from any institution, she must present diplomas or official certificates, sufficient to furnish evidence of her holding such degree or degrees.

Admission as a Graduate Student does not imply admission to candidacy for a Degree.

Graduate Students, not Bachelors of Arts of Radcliffe College, who wish to become candidates for any degree, should make early application to learn the conditions under which they may be accepted as qualified for candidacy.

#### RESIDENCE.

Graduate Students are required to be in regular attendance on the exercises in some course or courses of instruction, and to do all the required work (including all examinations) in the courses which they elect; or to carry on regular work in some Laboratory or Museum or in the Library, under the frequent inspection and criticism of some specified instructor or instructors.

#### STUDIES.

The instruction open to students in Radcliffe College is arranged in one list of Courses of Instruction, consisting of Full Courses and Half-Courses. These are distributed into *three groups* in the several branches of study, namely,

- (1) Courses designed primarily for Undergraduates.
- (2) Courses for Graduates and Undergraduates.
- (3) Courses primarily for Graduates.

Any course (or half-course) in the list is open to all Graduate Students who present sufficient evidence of qualification for that course. It is sometimes advisable, and is not unusual, for a Graduate student to choose some of her studies from the First, or Undergraduate, Group; but such studies are not ordinarily counted for the degree of A. M. Many of the studies of the Second Group are distinctly of Graduate grade, in the sense of being in advance of such as are ordinarily pursued for a Bachelor's degree. They are thorough and comprehensive courses, characterized by advanced methods of instruction and study; and are in fact largely chosen by Graduate Students, and found to be suitable to their needs. To some of these courses, undergraduates are admitted only by special leave of the instructor. To the courses of the Third Group, undergraduates are admitted only on the recommendation of the instructor.

Among the higher courses of instruction—of the Second and Third Groups—in nearly every department of study, are Courses of Research and Seminaries, for students who wish to do special work of an advanced character. These courses are carried on under various plans of administration in the several departments, but always with the object of affording opportunity for regular independent study.

A complete year's work for a Graduate Student regularly consists of four full courses of instruction, of advanced grade, or of their equivalent in courses and half-courses, pursued with high credit throughout an academic year. All the work required in such courses must be done, and all the examinations must be passed; unless the student has leave from the Academic Board, with the approval of the Instructor, to omit some part of the ordinary requirement.

A student who wishes to devote her time, largely or wholly, to special study of an advanced character may count a course embracing such study as equivalent to more than one course, up to a complete year's work, or may carry on such study outside and in place of the regular courses, under the direction and supervision of some specified Instructor or Instructors. In either case, the substitution proposed must have the approval or consent of the Instructor or Instructors concerned; and the permission of the Academic Board is required.

#### DEGREES.

The requirements for the degrees of Bachelor of Arts and Master of Arts are the same as for the corresponding degrees in Harvard University. The diplomas are countersigned by the President of Harvard University and bear the University seal.

The ordinary requirement for the degree of Master of Arts for a graduate of a college of good standing consists of at least one year of residence and study devoted to advanced work approved by the Academic Board of Radcliffe College as affording suitable preparation for the degree and completed with high credit. Other persons will be admitted to the degree on conditions to be determined in each case.

The programme of study for the degree of Master of Arts must form a consistent plan of work pursued with some definite aim, though it need not lie wholly in one Department or field. This work may be done either in, or in connection with, the regular courses of instruction, or independently of them. In the latter case it must be carried on under the guidance of some specified instructor.

#### TUITION FEES.

The annual tuition fee for a student doing full work is two hundred dollars, in addition to the special laboratory fees named below. It is payable, one hundred and twenty-five dollars on October 1, seventy-five dollars on February 1.

For those students who are permitted by the Academic Board to take less than four courses the charges are as follows:—

For any regular course, not a laboratory course of course of research, sixty dollars; for any half-course, not a laboratory course, thirty dollars; for a course of research or for a laboratory course, besides the special laboratory fees, a sum equal to the fee for one, two, or more courses, according to the number of courses to which the Academic Board shall consider it equivalent as part of the student's work for the year. But the minimum fee charged for any student is forty dollars, and the maximum fee, in addition to the special laboratory fees, is two hundred dollars, covering any number of courses.

Two-thirds of the fee is payable on the first day of October, the remaining third on the first day of February.

Students in laboratory courses pay in addition a special laboratory fee of five dollars for each course and of five dollars or two and a half dollars for each half-course.

No student will be admitted for any shorter time than a whole academic year, except by special vote of the Academic Board.

A student doing full work and therefore liable for the full tuition fee of two hundred dollars is entitled to a partial remission of fee in case of properly notified withdrawal from college or protracted absence, as follows: If she withdraws during the year she is charged only to the end of the third in which she leaves, provided that before that time she gives written notice of her withdrawal to the Dean, otherwise she is charged to the end of the third in which such written notice is given.

If she is absent with the consent of the Academic Board for three consecutive months she is entitled to a deduction of fifty dollars from the year's tuition fee; if she is absent for the whole year, not including the midyear and final examinations or either of them, she is entitled to a deduction of one hundred and fifty dollars provided she has given in either case previous notice of her intended absence to the Secretary.

In case of students liable for less than the full fee of two hundred dollars no deduction is made for absence or withdrawal. No student is entitled to a reduction of fee on account of withdrawal from a course or courses after the year has begun unless she withdraws from the college and then only if she has been doing full work.

No claim for deduction of fee will be considered if presented after the close of the Academic year in which the absence or withdrawal took place.

No student is permitted to attend any college exercise after October 15th in any year unless all bills previously rendered for that year have been paid; and similarly no student is permitted to attend any College exercise after March 1st unless all bills previously rendered have been paid; and in no event is any degree conferred unless all dues to the College have been paid at least twenty-four hours before Commencement Day.

## THE CHARLES ELIOT NORTON FELLOWSHIP IN GREEK STUDIES.

In 1902 James Loeb, of the Class of 1888, gave securities valued at four-teen thousand one hundred dollars for the permanent establishment of this fellowship, which he had maintained during the year 1901–02, "in grateful recognition of the long and great friendship which Professor Norton has shown him since his boyhood, and in order to record in a fitting manner the eminent services which Professor Norton has rendered the cause of Archæology, and his beneficent prominence in the Archæological Institute of America and the American School of Classical Studies at Athens."

Competition for the fellowship is open to members of the Senior Class in Harvard College and of the Graduate School of Harvard University, and to Seniors and Graduate Students in Radcliffe College. It has an annual income of six hundred dollars.

The award will be made by a committee appointed by the Department of the Classics of which committee Professor Norton is to be a member during his life, on the basis (1) of a Thesis on a subject approved by this committee, and (2) of such other evidence of scholarship as may be accessible. In the award, no account is be taken of the financial means of the competitor.

The editors of the Harvard Studies in Classical Philology are to have the right to publish the thesis of the successful candidate.

The incumbent of the fellowship must agree to pursue his studies for the year of his incumbency at the American School of Classical Studies at Athens, and to devote himself to the study of some special subject approved by the Committee in the field of Greek History, Literature, Art, Archæology, Epigraphy, or Topography. He shall also agree to write and publish at the end of the year of his fellowship, a monograph embodying the results of his investigations.

In accordance with the terms of the fellowship, the third award will be made in the Spring of 1903, for the academic year 1903-04. The following subjects for theses are proposed by the committee:—

Plato's Conception of Art.

Greek Myths of which the sole evidence is in Works of Art.

The Part taken by Women in Greek Cults.

Greek Armour with especial reference to the form and ornamentation of the Helmet.

Candidates may, however, with the consent of the committee, write on other classical subjects.

Applications for admission to candidacy must be made to the Chairman of the Department of the Classics not later than November 1, 1903, and the theses of approved candidates must be presented to the Chairman not later than March 1, 1904.

#### SOUTH END HOUSE FELLOWSHIP.

A friend of Radcliffe College has established in Radcliffe College for two years a fellowship to be called "The South End House Fellowship," to be devoted to the promotion of the study of social problems by women. The amount of the fellowship will be four hundred and fifty dollars a year, in addition to such tuition charges at Radcliffe College as the incumbent of the fellowship incurs.

The fellowship will be provided subject to the following conditions:

- 1. The incumbent to be registered as a graduate (or special) student in Radcliffe College, but to be in residence during eleven months in the year at the South End House (Women's Residence) in Boston.
- 2. The incumbent to be nominated each year by the Dean of Radcliffe College and the Professor of Sociology, in conference with the Head of the South End House and the donor of the fellowship.
- 3. The incumbent to devote not less than one-half of her working time to the original investigation of some concrete problem of the city life in Boston under the direction of the Professor of Sociology, in conference with the Head of the South End House.

4. Preference to be given, among candidates equally deserving, to the graduates of Radcliffe College; but the fellowship to be open to graduates of other colleges, and full completion of a college course not to be an indispensable requirement if there are other evidences of special fitness.

#### SCHOLARSHIPS.

#### THE EDWARD AUSTIN SCHOLARSHIPS.

In 1899, the sum of \$25,500 was received by Radcliffe College in settlement of the bequest of \$30,000, made by Edward Austin, the income thereof to be paid to "needy, meritorious students and teachers, to assist them in payment of their studies,"

In 1900 the heirs of Edward Austin gave \$2,250 to be added to this fund. For the year 1902–03 three scholarships were awarded from the income of this fund.

One scholarship of \$250 to HARRIET ALICE FRASER (McGill University), A. B., 1896, of Richmond, Que.

One scholarship of \$200 to Maud Melissa Daniels, of Somerville, Mass.

One scholarship of \$200 to CAROLINE STRONG of Portland, Ore.

One scholarship of \$200 to Amelia Clewley Ford, of Cambridge, Mass. Applications for the year 1903–04 should be in the hands of the Dean by the first day of June, 1903.

#### THE HARVARD ANNEX SCHOLARSHIP.

By gift of the Alumnae and students of the "Harvard Annex" and their friends, an annual scholarship has been established to be known as "The Harvard Annex Scholarship founded by Alumnae of Radcliffe College." The fund provides for the tuition fees of one student.

In 1902-03 this scholarship was awarded to Theodora Bates, A. B., 1902. Applications for this scholarship for the year 1903-04 should be in the hands of the Dean by the first day of June, 1903.

#### THE ELLEN M. BARR SCHOLARSHIPS.

By the terms of the will of the late Ellen M. Barr, the residue of her estate, after the payment of debts and legacies, was bequeathed to Radcliffe College. Subject to the payment of an annuity, the income of this bequest is to be applied "in the form of annual scholarships of not less than two hundred and fifty dollars and not more than three hundred dollars each, for the benefit of students in Radcliffe College, who, in point of character, ability and physical constitution, give promise of future usefulness, and who stand in need of pecuniary assistance."

In 1902-03 five scholarships from this fund of the value of \$250.00 each, were awarded to Frances Margaretta Kendall and Constance Alton Willard of the class of 1903, and to Mary Louise Cady, Margaret Cranitch Cotter, and Myrtle Clarissa Dickson of the class of 1904.

Applications for the year 1903-04 should be in the hands of the Dean by the first day of June, 1903.

#### THE ELLA LOWELL LYMAN MEMORIAL SCHOLARSHIP.

By gift of Mr. Arthur T. Lyman of Boston, an annual scholarship has been established in memory of his wife, Ella Lowell Lyman. The fund provides for the tuition fees of one student.

In 1902-03 this scholarship was awarded to Elsie Miriam Paine of the class of 1904.

Applications for the year 1903-04 should be in the hands of the Dean by the first day of June, 1903.

#### THE ELIZABETH CARY AGASSIZ SCHOLARSHIP.

The Elizabeth Cary Agassiz Scholarship is a gift to Radcliffe College from various friends of Mrs. Agassiz, who wished that it should bear her name. The fund provides for the tuition fees of one student.

In 1902-03 this scholarship was awarded to Anna Rosa Liden of the class of 1905.

Applications for the year 1903-04 should be in the hands of the Dean by the first day of June, 1903.

#### THE AGNES IRWIN SCHOLARSHIP.

By gift of six hundred and eighty former pupils of the first Dean of Radcliffe College, the Agnes Irwin Scholarship has been established. By the terms of the gift the student to have the benefits of this scholarship is to be appointed by Miss Agnes Irwin, and all details regarding it are to be arranged by her for the present and the future. The fund provides for the tuition fees of one student.

In 1902-03 this scholarship was awarded to Clara Hahn Olmstead, a special student.

Applications for the year 1903-04 should be in the hands of the Dean by the first day of June, 1903.

#### THE WIDOW JOANNA HOAR SCHOLARSHIP.

The College has established The Widow Joanna Hoar Scholarship with funds contributed by an unknown friend in memory of the widow of Charles Hoar, Sheriff of Gloucester in England, who came to America with her children in 1638. In awarding this scholarship preference is to be given to natives of Concord, Mass., or to daughters of citizens of that place. The fund at present provides for the tuition fees of one student.

In 1902-03 this scholarship was awarded to IDA ALICE SLEEPER of the class of 1904.

Applications for the year 1903-04 should be in the hands of the Dean by the first day of June, 1903.

#### THE MARIA DENNY FAY MEMORIAL SCHOLARSHIP.

An annual scholarship of two hundred dollars (\$200) has been established, which provides for the tuition fees of one student.

In 1902-03 this scholarship was awarded to Mary Elizabeth Lily Cosgrove, of the class of 1905.

Applications for the year 1903-04 should be in the hands of the Dean by the first day of June, 1903.

#### THE JOSIAH M. FISKE MEMORIAL SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske, of New York City, an annual scholarship has been established in memory of her late husband, Josiah M. Fiske, who was once a resident of Cambridge. The fund provides for the tuition fees of one student.

In 1902-03 this scholarship was awarded to Helener Grant Robertson, of the class of 1905.

Applications for the year 1903-04 should be in the hands of the Dean by the first day of June, 1903.

#### PRIZES.

#### THE SARGENT PRIZE.

This prize was first offered in 1886-87 by John Osborne Sargent of New York, of the class of 1830, and was endowed in his memory, in 1892, by his daughter, Georgiana W. Sargent. The prize is of one hundred dollars, and is offered for the best metrical translation of a lyric poem of Horace, to be selected each year by the Department of the Classics.

The selection for 1903 is the thirty-fifth Ode of the first Book.

Undergraduates of Harvard College and of Radcliffe College may compete for this prize. The prize may be withheld if no competitor appears to deserve it.

The versions must be neatly and legibly written or typewritten, upon letter paper, of good quality, of the quarto size, with a margin of not less than one inch at the top, at the bottom, and on each side; and the sheets must be securely stitched or riveted together. The title-page of each manuscript must bear an assumed name, with a statement of the writer's academic standing:—that is whether she is a graduate or an undergraduate; and the writer must give in, with her manuscript, a sealed letter, containing her true name and superscribed with her assumed name.

The manuscript must be deposited with the Dean of Radcliffe College on or before the first day of May, 1903.

In 1890 the Sargent Prize was awarded to Helen Leah Reed, of the class of 1890.

In 1892 the Sargent Prize was awarded to Margaret Foster Herrick, a special student.

In 1901 the Sargent Prize was awarded to Norma Rose Waterbury, of the class of 1904.

#### THE GEORGE B. SOHIER PRIZE.

This prize was founded by the late Waldo Higginson of Boston, of the Class of 1833 in Harvard College, in memory of his brother-in-law George B. Sohier of the Class of 1852. The endowment is for "one prize of \$250 for the best thesis presented by a successful candidate for Honors in English or in Modern Literature. If no thesis is deemed worthy of a prize, no prize will be given." The competitors may be either (1) undergraduates in Harvard College, (2) Harvard graduates who are resident at the University as students in the Graduate School, or (3) students in Radcliffe College.

In 1897 the Sohier Prize was awarded to Beulah Marie Dix, of the class of 1897. Subject: "Published Collections of English and Scottish Ballads, 1765–1802."

#### THE CAROLINE I. WILBY PRIZE.

This prize was founded in 1897 in memory of Miss Caroline I. Wilby, by her friends and former pupils.

The fund, originally \$3,060, has been somewhat increased, and the income is to be given annually to a Radcliffe student as a prize "for the best original work in any department."

The Wilby Prize was given for the first time in 1899 to Kate O. Petersen, Vassar, A. B. 1890, Radcliffe, A. M. 1895, Radcliffe graduate student, 1895–97, for a thesis on the Sources of Chaucer's Nonne Prestes Tale, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1900 to Lucy Allen Paton, A. B., 1892, A. M. 1894, Radeliffe graduate student, 1898–1900, for a thesis on Morgain la Fée, to be published in the series of Radeliffe College Monographs.

The prize may be withheld if no thesis or original work is deemed worthy of this prize.

#### JUNE EXAMINATIONS.

The examinations will probably be held in the following places:—Cambridge, at 10 Garden Street.

Andover, in the rooms of Phillips Academy.

Milton, in the rooms of Milton Academy,

Groton, in the rooms of Groton School.

Southborough, in the rooms of St. Mark's School.

Worcester, in the rooms of the English High School.

Lynn, in the rooms of the Classical High School.

Springfield, in the rooms of the Springfield High School.

Fall River, in the Durfee High School Building.

South Byfield, in the rooms of Dummer Academy.

Exeter, N. H., in the rooms of Phillips Exeter Academy.

Concord, N. H., in the rooms of St. Paul's School.

Portland, Me., in the rooms of the Portland High School.

Newport, R. I., in the rooms of the Rogers High School.

Pomfret Centre, Conn., in the rooms of the Pomfret School.

Washington, Conn., in the rooms of the Gunnery School.

New York, N. Y., in the lecture room of the Young Men's Christian Association, 318 West 57th Street.

Tarrytown-on-Hudson, N. Y., in the rooms of Hackley Hall.

Garden City, N. Y., in the rooms of St. Paul's Cathedral School.

Albany, N. Y., in the rooms of the Young Men's Christian Association.

Buffalo, N. Y., in the High School Building, corner of Court and Franklin Streets.

Morristown, N. J., in the rooms of the Morristown School.

Philadelphia, Pa., in the rooms of the Young Men's Christian Association Building, corner of Fifteenth and Chestnut Streets.

Pottstown, Pa., in the rooms of the Hill School.

Scranton, Pa., in the rooms of the School of the Lackawana.

Pittsburgh, Pa., in the rooms of Shadyside Academy.

Washington, D. C., in the rooms of the Central High School.

Louisville, Ky., in the rooms of the Young Men's Christian Association, corner of Fourth Avenue and Broadway.

Lima, Ind., in the rooms of Howe School.

Milwaukee, Wis., in the rooms of the East Division High School.

Cleveland, O., in the Central High School Building.

Cincinnati, O., in the rooms of the Young Men's Christian Association.

Youngstown, O., in the rooms of the Rayen School.

Chicago, Ill., in the rooms of the Young Men's Christian Association, 153 La Salle Street.

St. Paul, Minn., in the rooms of St. Paul Academy, 155 Western Ave.

Kansas City, Mo., in the rooms of the Central School.

St. Louis, Mo., in the rooms of the Board of Education, 9th and Locust Streets.

Denver, Col., in the rooms of the Denver High School (District No. 1), corner of Nineteenth and Stout Streets.

San Francisco, Cal., in the rooms of the Mechanics' Institute, 31 Post Street.

Belmont, Cal., in the rooms of Belmont School.

Portland, Oregon, in the lecture-room of the Portland Library.

Seattle, Wash., in the rooms of the Central School Building.

Bonn, Germany, at the Hotel Kley.

Honolulu, Hawaii.

#### RADCLIFFE COLLEGE.

#### ORDER OF EXAMINATIONS. (June and September.)

Monday, June 22, and September 21.

8-9 а. м.	All candidates	meet	at	10	Garden	Street	the	officer	in	charge
of the examinations.										

9-10.	Elementary Physics.	$2-3\frac{1}{2}$ .	Plane Geometry.
101_12	Elementary French	2_4	Geometry

$10\frac{1}{2}-12.$	Elementary French.	2-4.	Geometry.
124-14.	Solid Geometry.	$4\frac{1}{2}$ -6.	Elementary German.

#### Tuesday, June 23, and September 22.

8-9.	Physiography.	$1\frac{1}{2}$ – $3\frac{1}{2}$ .	Elementary English (a).
94-104.	Chemistry.	4-6.	Advanced Latin.

103-123. Elementary Latin.

#### Wednesday, June 24, and September 23.

8-9.	Logarithms and Trigonometry.	$11-12\frac{1}{2}$ .	Elementary History.
$9\frac{1}{4}-10\frac{3}{4}$ .	Elementary Algebra.	$1\frac{1}{2}$ - $3\frac{1}{2}$ .	Advanced French.
		4-6	Advanced Greek

#### Thursday, June 25, and September 24.

8-9.	Meteorology.	$1\frac{3}{4}$ - $3\frac{3}{4}$ .	Advanced German.
94-114.	Elementary Greek.	4-6.	Advanced History.
01 103	Hammony		

94-104. Harmony.

114-124.

Friday, June 26, and September 25.

14-24. Advanced Physics.

Advanced Algebra.

Saturday, June 27, and September 26.

9 $\frac{1}{4}$ -10 $\frac{1}{4}$ . Astronomy.  $11\frac{3}{4}$ - $12\frac{3}{4}$ . Anatomy, Physiology and Hygiene.

#### SEPTEMBER EXAMINATIONS.

The September Examinations will be held in Cambridge only, on Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, September 21, 22, 23, 24, 25 and 26.

#### EXAMINATIONS IN ENGLISH A, GERMAN A, AND FRENCH A.

In 1903, the examination in English A will be held in accordance with the programme given below. This examination, formerly held in Cambridge only, is now held in June at all the places in which the Harvard College admission examinations are held in 1903.

#### FRIDAY, JUNE 26, AND SEPTEMBER 25.

3-6 P. M. English A.

This examination is not identical with the examination in English (b).

The examinations in German A and French A correspond to the admission examinations in Elementary German and French, and will be held on Monday, June 22, and Monday, September 21.

Monographs prepared by the students are published and sold by Messrs. Ginn & Company.

Besides the present publication, Radcliffe College issues annually a list of its Courses of Study and an Annual Report. These documents, and also separate pamphlets, published by Harvard University, giving detailed accounts of the work of the principal departments, may be had by addressing

Radcliffe College,

Cambridge, Massachusetts.



THE LURANI OF THE UNIVERSITY OF DELIBOR

# Madcliffe College

CAMBRIDGE, MASSACHUSETTS

1905

\*\*\* The legal title of the Corporation (to be used in making gifts and bequests) is "RADCLIFFE COLLEGE." It should be described as established in Cambridge, Massachusetts.

Correspondence should be addressed to RADCLIFFE COLLEGE, Cambridge, Massachusetts.

The College buildings are open to visitors interested in the work of the College, both in vacations and in term-time; though students only are admitted to the class-rooms during the hours of lectures.

The Reference Library is in the Gilman Building.

The Laboratories of Chemistry, Physics, and Botany are in buildings on the grounds.

The Laboratory of Biology occupies quarters in the University Museum in Oxford Street.

The Gymnasium is open to all students without charge.

The Dean and the Secretary may be consulted at Fay House during termtime, and special appointments may be made as required.

The President may be found at Fay House every Monday afternoon at half past two during term-time.

The Academic year begins on the Thursday following the last Wednesday in September. In 1905 it is September 28. Students report for registration at 9 A. M. of that day.

The summer vacation begins on the last Tuesday in June, and ends on the last Wednesday in September.

The Christmas recess is from Dec. 23, 1905, to Jan. 2, 1906, inclusive.

The Spring recess is from April 16 to April 22, 1905, inclusive.

### Radcliffe College.

RADCLIFFE COLLEGE, the successor of the Society for the Collegiate Instruction of Women, offers systematic collegiate instruction to women under the professors and other teachers of Harvard University. More than a hundred instructors of the University are teachers in Radcliffe College.

Fay House, 10 Garden Street, contains the offices and some of the recitation rooms. The other recitation-rooms, the library, and the gymnasium are near Fay House. The College has four laboratories, of Physics, Chemistry, Botany, and Biology. The collections of the Museum of Comparative Zoölogy, the Peabody Museum of American Archaeology, the University Museums of Geology, Botany, and Mineralogy, the Semitic Museum, and the Germanic Museum are also open to the students; and, by vote of the President and Fellows of Harvard College, the students have the use of the University Library, containing 500,000 volumes. Opportunities for study in the Astronomical Observatory, the Botanic Garden, and the Herbarium are also afforded.

The requirements for admission are identical with those for admission to Harvard College. The courses of instruction given in Radcliffe College correspond to both "Undergraduate" and "Graduate" courses offered by Harvard University, and are more than sufficient to enable a woman to perform the work required by the University for the degrees of A. B. and A. M. In addition to these, Graduate Students in Radcliffe College have access to a large number of Graduate courses in Harvard University. The examinations are the same in both institutions, and the diplomas conferring the degrees of A. B. and A. M. are countersigned by the President of Harvard University as a guarantee that these degrees are equivalent to the corresponding degrees given by the University.

For provisions for the admission of Special Students and Graduate Students, see pages 36, 38, 39, and 40.



## Associates of Radcliffe College

ELIZABETH CARY AGASSIZ.

EZRA HENRY BAKER, A. B.

ELIZABETH BRIGGS, A. M.

LE BARON RUSSELL BRIGGS, A. M., LL. D.

WILLIAM ELWOOD BYERLY, PH. D.

ELLA LYMAN CABOT.

MARY COES, A.M.

MARY HUNTINGTON COOKE.

LILIAN HORSFORD FARLOW.

FREDERICK PERRY FISH, A. B.

ARTHUR GILMAN, A. M.

STELLA SCOTT GILMAN.

GEORGE LINCOLN GOODALE, M. D., LL. D.

WILLIAM WATSON GOODWIN, Ph. D., LL. D., D. C. L.

JOHN CHIPMAN GRAY, LL. D.

HENRY LEE HIGGINSON, A. M., LL. D.

CAROLINE LOUISE HUMPHREY, A. B.

AGNES IRWIN, LITT. D.

VIRGINIA NEWHALL JOHNSON, A. B.

ALICE MARY LONGFELLOW.

ELLEN FRANCIS MASON.

FANNY PEABODY MASON.

JOHN FARWELL MOORS, A. M.

CHARLES ELIOT NORTON, LITT. D., LL. D.

JAMES MILLS PEIRCE, A.M.

CLEMENT LAWRENCE SMITH, A. M., LL. D.

EZRA RIPLEY THAYER, A. M., LL. B.

JOSEPH BANGS WARNER, A. M., LL. B.

SARAH YERXA, A. B.

**H**onorary President
ELIZABETH CARY AGASSIZ

President

LEBARON RUSSELL BRIGGS

Dean

AGNES IRWIN

Treasurer

HENRY LEE HIGGINSON

Conneil

LEBARON RUSSELL BRIGGS, Chairman AGNES IRWIN HENRY LEE HIGGINSON

WILLIAM ELWOOD BYERLY

WILLIAM WATSON GOODWIN

ELLA LYMAN CABOT LILIAN HORSFORD FARLOW Ex officio

EZRA RIPLEY THAYER
JOHN FARWELL MOORS
ALICE MARY LONGFELLOW

Academic Board

WILLIAM ELWOOD BYERLY, Chairman LE BARON RUSSELL BRIGGS

Agnes Irwin

Ex officio

EDWARD LAURENS MARK SILAS MARCUS MACVANE HORATIO STEVENS WHITE JOHN HENRY WRIGHT

Edwin Herbert Hall Hans Carl Günther von Jagemann

GEORGE LYMAN KITTREDGE CHARLES HALL GRANDGENT

Secretary

MARY COES

Librarian

CAROLINE FARLEY

Mistress of Bertram Hall Eliza Mason Hoppin

Director of the Gymnasium Elizabeth Agnes Wright

### Standing Committees.

The House Committee in charge of buildings, house-service, grounds, and repairs and additions, Miss Irwin, Chairman, Mr. Briggs (ex officio), Miss Longfellow, Mr. Warner, Mr. Baker.

The Students' Committee in charge of the general discipline of the students, oversight of their homes while in Cambridge, and of their amusements, clubs, and social life, Miss Irwin, Chairman, Mrs. Cooke, Miss Longfellow, Miss Coes, Mrs. Cabot.

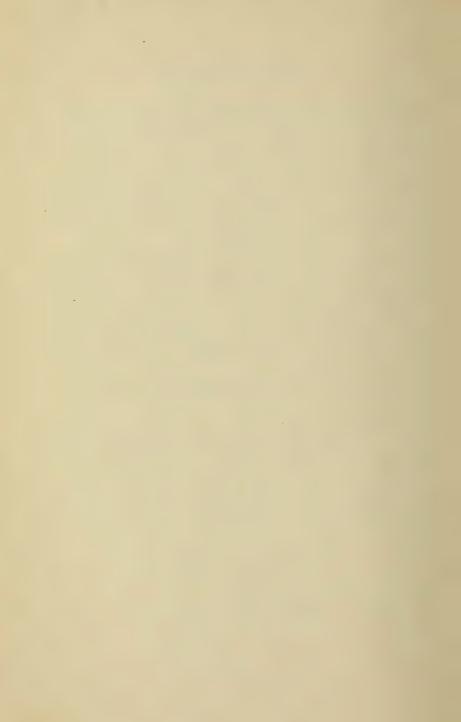
The Library Committee with general supervision of the Library, Mrs. Farlow, Chairman, Mr. Briggs (ex-officio), Miss Irwin, Mr. Goodwin, Miss E. F. Mason.

The Finance Committee in charge of all matters pertaining to Expenditure, Endowment Fund, etc., Mr. Moors, Chairman, Mr. Baker, Mr. Fish, Mr. Gilman, Mr. Higginson.

The Committee on the Gymnasium, Mrs. Farlow, Chairman, Miss Irwin, Miss Longfellow.

The Committee on Bertram Hall, Miss Irwin, Chairman, Mr. Moors, Mrs. Cooke, Miss Hopkinson, Miss Yerxa.

For the information of school officers and others, the College keeps a list of those students who have received degrees or certificates and wish to find positions as teachers.



# REQUIREMENTS FOR ADMISSION TO RADCLIFFE COLLEGE.

## ADMISSION OF CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS.

The requirements for admission to Radcliffe College are the same as those for admission to Harvard College. Radcliffe College holds no independent entrance examinations, but is authorized to make arrangements by which women may take the Harvard Examinations and have their work submitted to the Harvard Examiners. These examinations may be taken in Cambridge, and in other places in which the Harvard examinations are held in June. The September examinations are held in Cambridge only.\*

Two examinations of candidates for admission will be held in Cambridge in 1905, in Fay House. The days and hours are given in detail on page fifty-one of this pamphlet.

The academic year begins on Thursday, September 28, 1905. All Students register at the Office on that day at nine A. M.

Any one expecting to take admission examinations should register for such examinations on a form which may be obtained from the Secretary. When writing for this form she should say whether she is a Preliminary or a Final Candidate. The Registration Blanks of all candidates who wish to take examinations in June should be properly filled and in the hands of the Secretary by June 10; those of candidates who wish to take examinations in September, by September 10.

Every candidate for admission to Radcliffe College is required to furnish a certificate of honorable dismissal from the school or college which she has attended, or from the tutor with whom she has studied. She must

FA fee of five dollars for the whole examination is to be paid by each candidate in June, and again in September if she then presents herself. For this a receipt will be given, and the amount will be deducted from the first payment for tuition. The fee will not be returned to a candidate who does not enter college.

<sup>\*</sup> For the examinations of the College Entrance Examination Board see page 51.

also refer to two persons from whom information about her may be obtained. References should be sent to the Secretary of the college a month before the examination.

#### TERMS OF ADMISSION TO RADCLIFFE COLLEGE.

The studies which may be presented in satisfaction of the requirements for admission to the Freshman Class in Radcliffe College are named together in the following lists. The figure attached to each study indicates the relative weight which will be given to that study in determining the question of the candidate's fitness for admission:

Elementary	Advanced
English (a) or (b) (4) Greek (4) Latin (4) German (2) French (2)	Greek (2) Latin (2) German (2) French (2)
$ ext{History} egin{dcases} One \ of the following two: \ Greek \ and \ Roman \ English \ and \ American \end{cases}$	History { One of the following four: Ancient English and American of Europe of a period
Harmony (2)	Counterpoint (2)
Algebra (2) Geometry (3) or Plane Geometry (2)	Algebra (1) Logarithms and Trigonometry (1) Solid Geometry (1) Astronomy (1)
Physics (2) Chemistry (2) Physiography (1) Anatomy, etc. (1)	Physics (2) Meteorology (1)

A candidate for admission must offer from this list studies amounting to 26 points, of which points at least four must be in advanced studies. The studies offered must include:—

English	4
One ancient language (Elem. Latin or Elem.	
Greek)	4
One modern foreign language (Elem. German or	
Elem. French,	2
Elementary History	2
Algebra	2
Geometry or Plane Geometry	3 or 2
Studies amounting to two points from the fol-	
lowing sciences (Elem. Physics, Chemistry,	
Physiography, Anatomy, Physiology, and	
Hygiene,	2
	19 or 18

No candidate may offer an Advanced study who does not at the same time or earlier offer the corresponding Elementary study; but Physics is considered Elementary with respect to Meteorology, and Geometry or Plane Geometry, with respect to Astronomy.

Candidates who are looking forward to the extended study of English or of any other modern literature are advised to acquire a knowledge of Greek as well as of Latin.

For terms of admission to advanced standing, see page 35.

#### DEFINITIONS OF REQUIREMENTS.

#### GOOD ENGLISH.

Clear and idiomatic English is expected in all examination papers and note-books written by candidates for admission. Teachers are requested to insist on good English, not only in translations, but in every exercise in which the pupil has occasion to write or to speak English.

#### 1. English.

A candidate for admission to Radeliffe College may take either of the examinations, (a) and (b), described below. If she passes (b) she is exempt

from the prescribed English of the Freshman year (English A); but if she passes it with Grade D she is required to take before the end of her second year a half-course in English Composition in addition to her regular elective courses. Furthermore, on the evidence of her examination book she may be credited with an ungraded mark of "pass," but required to take the prescribed English of the Freshman year.

#### (a) Elementary English.

The examination will consist of two parts, which, however, cannot be taken separately:—

I. The candidate will be required to write a paragraph or two on each of several topics chosen by her from a considerable number — perhaps ten or fifteen — set before her on the examination paper.

In 1905 the topics will be drawn from the following works:—

Shakspere's The Merchant of Venice and Julius Caesar; The Sir Roger de Coverley papers in the Spectator; Goldsmith's The Vicar of Wakefield; Coleridge's The Ancient Mariner; Scott's Ivanhoe; Carlyle's Essay on Burns; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

In 1906, 1907, and 1908 the topics will be drawn from the following works:—

Shakspere's Macbeth and The Merchant of Venice; The Sir Roger de Coverley Papers in the Spectator; Irving's Life of Goldsmith; Coleridge's The Ancient Mariner; Scott's Ivanhoe and The Lady of the Lake; Tennyson's Gareth and Lynette, Lancelot and Elaine, and the Passing of Arthur; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

The candidate is expected to read intelligently *all* the books prescribed. She should read them as she reads other books; she is expected, not to know them minutely, but to have freshly in mind their most important parts. In every case the examiner will regard knowledge of the book as less important than ability to write English.

II. A certain number of books will be prescribed for careful study. This part of the examination will be upon subject-matter, literary form, and logical structure, and will also test the candidate's ability to express her knowledge with clearness and accuracy.

The books prescribed for this part of the examination in 1905 are: -

Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

The books prescribed for this part of the examination in 1906, 1907, and 1908, are:

Shakspere's Julius Caesar: Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America; Macaulay's Essay on Addison, and Life of Johnson.

No candidate will be accepted in English whose work is seriously defective in point of spelling, punctuation, grammar, or division into paragraphs.

In connection with the reading and study of the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry should be committed to memory. The essentials of English grammar should not be neglected in preparatory study.

The English written by a candidate in any of her examination-books may be regarded as part of her examination in English, in case the evidence afforded by the examination-book in English is insufficient.

#### (b) English.

The examination will consist of questions in Rhetoric,\* questions in Literary History from the time of Shakspere, and compositions based on the following works:

Palgrave: Golden Treasury (First Series) Shakspere: Julius Caesar The Merchant of Venice Macbeth Twelfth Night or As You Like

King Lear or Hamlet Milton:

L'Allegro

Il Penseroso Comus

Bunyan: .

The Pilgrim's Progress, or

Robinson Crusoe

Dryden:

Alexander's Feast

To the Memory of Mr. Oldham Upon the Death of the Earl of

Dundee

\*A. S. Hill's Principles of Rhetoric is used for the corresponding study in Rad. cliffe College, and is recommended for use in preparation for this examination.

Swift:

The Voyage to Lilliput

Addison and Steele:

The Sir Roger de Coverley Papers

Pope:

Epistle to Arbuthnot

Goldsmith:

The Vicar of Wakefield The Deserted Village

Scott:

The Lady of the Lake

Ivanhoe

Quentin Durward

Macaulay:

Life of Johnson

Lays of Ancient Rome

Byron:

Mazeppa

The Prisoner of Chillon

Irving:

The Legend of Sleepy Hollow

Rip Van Winkle

Tales of a Traveller

Thackeray:

Henry Esmond

Dickens:

A Tale of Two Cities, or

David Copperfield

Browning: Selections; for example,

Cavalier Tunes

The Lost Leader

How They Brought the Good

News from Ghent to Aix

Evelyn Hope

Home Thoughts, from Abroad

Home Thoughts, from the Sea

Incident of the French Camp

The Boy and the Angel

One Word More

Hervé Riel

Pheidippides

Tennyson: Selections; for example,

Enid

Elaine

The Passing of Arthur

The Lady of Shalott

The Lotus Eaters

Ulysses

Tithonus

The Revenge

Franklin:

Autobiography

Hawthorne:

The House of the Seven Gables

Longfellow:

Tales of a Wayside Inn

Lowell:

The Vision of Sir Launfal

The candidate is expected to read all the books prescribed.\* She should read them as she reads other books,—not trying to remember them in detail, but regarding each work as a whole and giving it such appreciation as shall enable her to write about it intelligently. In every case the examiner will regard knowledge of the books as less important than ability to write English; if the examination book in English affords insufficient

<sup>\*</sup> In connection with the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry committed to memory.

evidence, he will examine the written work of the candidate in other subjects.

No candidate will be accepted in English whose work is seriously faulty in spelling, grammar, punctuation, or division into paragraphs.

Preparation for the examination should occupy at least three school hours, or periods, a week for four years. Throughout the course frequent short compositions should be required as well as occasional long ones. Topics should be chosen by the pupil herself whenever that is possible; and the topics assigned by the instructor should be within the range of the pupil's knowledge and sympathies, and should be such as to awaken interest and stimulate intelligence. Criticism should be constant and thorough; it should take account of merits as well as of faults, and should never interfere with the honest expression of opinion or with the free play of individuality in thought and expression. Mechanical methods of every kind should be avoided; and attention should be fixed on principles rather than rules.

As to the right way of studying Rhetoric, attention is called to the following extract from the Report of the Vassar Conference:\*

"Though it is clear that the power to write a language can be obtained only by unremitting practice, yet, in the opinion of the Conference, such practice may properly be accompanied and illustrated by a course in elementary rhetoric. This course should include not only the principles of clearness, force, and good taste, but the principles of the arrangement of clauses in the sentence and of sentences in the paragraph. The teacher should bear in mind that any body of written English, of whatever length, is an organic unit, with principles that apply as well to the arrangement of the minor elements as to the grouping of the larger divisions of essay or book. Especial care should be taken that rhetoric is not studied by itself or for its own sake. Its connection with the pupil's actual written or spoken exercises should be kept constantly in view."

#### 2, 3. Greek.

# 2. Elementary Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least *two* school years. The two parts of the examination cannot be taken separately:—

<sup>\*</sup> Report of the Committee of Ten, page 95, section 8.

- (a) The translation at sight of simple Attic prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) A thorough examination on a prescribed portion of Xenophon (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Attic prose, involving the use of such words, constructions, and idioms only as occur in the portion of Xenophon prescribed.

The portion of Xenophon prescribed for this examination for 1905 is the second book of the Anabasis. For 1906 and thereafter the selection will be the first book of the Anabasis, chapters i-viii. Two year's notice will be given of any further change in the selection.

#### 3. Advanced Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least *three* school years. The second part of the examination (Greek Composition) is optional, and may be omitted without loss of credit:—

- (a) The translation at sight of Attic prose and of Homer, with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. In 1906 and thereafter there will also be questions on the Homeric poems and Homeric life. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into Attic prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Greek prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the elementary and advanced examinations in Greek is based on the assumption that the candidate has begun the study of Latin at least a year earlier, and has continued it along with her Greek course; otherwise the periods specified would not be sufficient.

In preparation for the elementary examination in Greek, candidates should read from 130 to 170 pages \* of Attic prose. For the advanced examination candidates should read from 30 to 50 pages more of Attic

<sup>\*</sup>The pages of the more recent Teubner text editions are taken as a standard in this statement.

prose, and from 3000 to 5000 verses of Homer. The reading of Homer may be advantageously begun with a thorough study of Iliad, Books I and II (to the catalogue of ships).

The pupil should be constantly guided in proper methods of reading, and trained to read the Greek intelligently, as Greek, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Greek, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Greek Composition, pupils should be trained, from an early stage of the preparatory course, to render into Greek, not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

#### 4, 5. Latin.

[Optional with new plan for 1905.]

# 4. Elementary Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *three* school years. The two parts of the examination cannot be taken separately:—

- (a). The translation at sight of simple Latin prose and verse. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) A thorough examination on a prescribed portion of Cicero's speeches (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose, involving the use of such words, constructions, and idioms only as occur in the speeches prescribed.

The portion of Cicero prescribed for this examination is the second, third, and fourth speeches against Catiline. Two years' notice will be given of any change in the selection.

<sup>\*</sup> See footnote, p. 14.

#### 5. Advanced Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *four* school years. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of Latin prose and verse, with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into Latin prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the examinations in Latin is made with reference to schools which have a four years' course. Schools which have a five years' course may more advantageously provide for beginning the study of Latin in the first year, with some diminution, if necessary, of the time devoted to it in the last years of the course.

The course of reading pursued in preparation for the examinations in Latin should include:—

- (a) Easy reading, included in or following a suitable introductory book ('Latin Lessons'), amounting to from 30 to 40 pages;\*
  - (b) Nepos (Lives) and Caesar (Gallic War), 90 to 120 pages;
- (c) Cicero, 90 to 120 pages, including the four speeches against Catiline and the speech on the Manilian Law, with additional speeches selected by the teacher;
- (d) Virgil and Ovid, 6000 to 10,000 verses, including the first six books of the Aeneid.

Preparation for the elementary examination alone should include (a) and (b), the four speeches against Catiline, and from 2000 to 3000 verses of Virgil, or of Ovid and Virgil.

The pupil should be constantly guided in proper methods of reading, and trained to read the Latin intelligently, as Latin, before undertaking to render it into idiomatic English. There should be constant practice in

reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Latin, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Latin Composition, pupils should be trained, from an early stage of the preparatory course, to render into Latin not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

### 4, 5. Latin.

[Optional with old plan for 1905; only plan for 1906 and thereafter].

## 4. Elementary Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *three* school years. The passages set for translation must be rendered into simple and idiomatic English. The three parts of the examination cannot be taken separately:—

- (a) The translation at sight of simple Latin prose.
- (b) An examination (which may include translation) on the first four books of Virgil's Aeneid, or on selected myths from Ovid's Metamorphoses, with questions on the subject-matter and on literary and historical allusions. Two years' notice will be given of any change in these alternative requirements.
- (c) An examination directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose.

#### 5. Advanced Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *four* school years. The passages set for translation must be rendered into simple and idiomatic English. The three parts of the examination cannot be taken separately:—

- (a) The translation at sight of Latin prose and verse, with questions on ordinary forms, constructions, and idioms, and on prosody.
- (b) An examination (which may include translation) on Cicero's four speeches against Catiline and the Defence of Archias; with questions on the subject-matter, the life of Cicero, and his position in literature.
- (c) The translation into Latin prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the examinations in Latin is made with reference to schools which have a four years' course. Schools which have a five years' course may more advantageously provide for beginning the study of Latin in the first year, with some diminution, if necessary, of the time devoted to it in the last years of the course.

The course of reading pursued in preparation for the examinations in Latin should include:—

- (a) Easy reading, included in or following a suitable introductory book('Latin Lessons'), amounting to from 30 to 40 pages; \*
  - (b) Nepos (Lives) and Caesar (Gallic War), 90 to 120 pages;
- (c) Cicero, 90 to 120 pages, including the four speeches against Catiline and the Defence of Archias, with additional speeches selected by the teacher;
- (d) Virgil and Ovid, 6000 to 10,000 verses, including the first six books of the Aeneid.

Preparation for the elementary examination alone should include (a) and (b), about 40 pages of Cicero, and either the first four books of Virgil's Aeneid, or the following myths from Ovid's Metamorphoses: Deucalion, Daphne, Phaethon, Cadmus, Pyramus, Andromeda, Proserpina, Niobe, Medea, Meleager, Philemon, Atalanta, Midas, Alcyone, Galatea.

The pupil should be constantly guided in proper methods of reading, and trained to read the Latin intelligently, as Latin, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Latin, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the advanced examination in Latin Composition, pupils should be trained, from an early stage of the preparatory course, to render into Latin not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

## 6, 7. German.

## 6. Elementary German.

- (a) The translation at sight of simple German prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of simple English sentences, or of easy connected prose, to test the candidate's familiarity with elementary grammar.

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than two hundred pages of easy German (including reading at sight in class).

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugation of the weak and the more usual strong verbs; the declension of articles, adjectives, pronouns, and such nouns as are readily classified; the commoner prepositions; the simpler uses of the modal auxiliaries; the elements of syntax, especially the rules governing the order of words.

Pronunciation should be carefully taught, and the pupils should have frequent opportunities to hear German spoken or read aloud. The writing of German from dictation is recommended as a useful exercise.

## 7. Advanced German.

- (a) The translation at sight of ordinary German. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of those who have read, in addition to the amount specified under Elementary German, not less than five hundred pages of classical and contem-

porary prose and verse. It is recommended that the reading be selected from such works as the following: Riehl, Culturgeschichtliche Novellen; Freytag, Bilder aus der deutschen Vergangenheit, Die Journalisten; Kohlrausch, Das Jahr 1813; Schiller, Der dreissigjährige Krieg, Wilhelm Tell, Maria Stuart, Die Jungfrau von Orleans; Goethe, Hermann und Dorothea, Egmont, Iphigenie; Lessing, Minna von Barnhelm. About one half of the amount read should be Nineteenth Century prose.

In the translation into German candidates will be expected to show a thorough knowledge of accidence, the elements of word-formation, the principal uses of prepositions and conjunctions and the essentials of syntax, especially the uses of the modal auxiliaries, and of the subjunctive and infinitive modes.

It is recommended that the candidate be trained to follow a recitation conducted in German and to answer in that language questions asked by the instructor.

#### 8, 9. French.

## 8. Elementary French.

- (a) The translation at sight of ordinary Nineteenth Century prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of simple English sentences or of easy connected prose, to test the candidate's familiarity with elementary grammar. Proficiency in grammar may also be tested by direct questions, based on the passages set for translation under (a).

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than four hundred pages (including reading at sight in class) from the works of at least three different authors. It is desirable that a portion of the reading should be from works other than works of fiction.

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugations of regular verbs, of the more frequent irregular verbs, such as aller, envoyer, tenir, pouvoir, voir, vouloir, dire, savoir, faire, and those belonging to the classes represented by ouvrir, dormir, connaître, conduire, and craindre; the forms and positions of personal pronouns and of posses-

sive, demonstrative, and interrogative adjectives; the inflection of nouns and adjectives for gender and number, except rare cases; the uses of articles, and the partitive constructions.

Pronunciation should be carefully taught, and pupils should have frequent opportunities to hear French spoken or read aloud. The writing of French from dictation is recommended as a useful exercise.

#### 9. Advanced French.

- (a) The translation at sight of standard French. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of candidates who have read, in addition to the amount specified under Elementary French, not less than six hundred pages of prose and verse from the writings of at least four standard authors. A considerable part of the amount read should be carefully translated into idiomatic English.

Candidates will be expected to show a thorough knowledge of accidence and familiarity with the essentials of French syntax, especially the uses of tenses, modes, prepositions, and conjunctions.

It is recommended that the candidate be trained to follow a recitation conducted in French and to answer in that language questions asked by the instructor.

# 10, 11. History (including Historical Geography).

# 10. Elementary History.

Either of the two following groups, each including two fields of historical study:—

- 1. Greek and Roman History.—(a) Greek History to the death of Alexander, with due reference to Greek life, literature, and art. (b) Roman History to the accession of Commodus, with due reference to literature and government.
- 2. English and American History.—(a) English History, with due reference to social and political development. (b) American History, with the elements of Civil Government.

For preparation in each of the two historical fields presented, a course of study equivalent to at least three lessons a week for one year will be necessary.

The candidate will be expected to show on examination such general knowledge of each field as may be acquired from the study of an accurate text-book of not less than 300 pages, supplemented by suitable parallel readings amounting to not less than 500 pages. The examination will call for comparison of historical characters, periods, and events, and in general for the exercise of judgment as well as of memory. Geographical knowledge will be tested by means of an outline map.

In the judgment of the Department of History it is desirable that Greek and Roman History be offered as a part of the preparation of every candidate.

## 11. Advanced History.

Any one of the four courses of study which follow: --

- 1. Greek History to the destruction of Corinth and Roman History to the death of Constantine (open to those candidates only who have offered English and American History as an elementary study).
- 2. English History and American History (open to those candidates only who have offered Greek and Roman History as an elementary study).
- 3. European History from the Germanic conquests to the beginning of the Seventeenth Century.
- 4. A year's study of any one of the four historical fields defined under Elementary History and not already offered by the candidate, together with a year's detailed study of a limited period \* within that field, selected with the approval of the Department of History. [This requirement will be discontinued after the year 1906.]

In every case the candidate will be expected to show on examination such an acquaintance with the whole field as may be gained from the study of good text-books, together with substantial parallel readings, and, further, such a detailed knowledge of some part of the field as may be gained from suitable topical study. A higher standard of acquirement and of power to combine results will be expected than in the elementary requirement.

\*For example, the Spartan and Theban supremacies, the Period of the Punic wars, the Stuart Period, the transition from the American colonial to the federal system. The examination in the second part of 4 will be specially adapted to the particular period selected and will be held in Cambridge only.

As further evidence of the candidate's proficiency satisfactory written work, done at school and certified by the teacher, must be submitted at the time of the examination. It must be presented in the form of a notebook (or bound collection of notes), containing not less than 50 written pages on each historical field offered, and must show practice in some of the following exercises:—

- (a) Notes and digests of the pupil's reading outside of the text-books.
- (b) Brief written tests requiring the application to new questions of knowledge previously acquired.
  - (c) Parallels between historical characters or periods.
- (d) Short studies of topics limited in scope, prepared outside of the classroom and illustrated by some reference to contemporary material.
- (e) Historical maps or charts showing explorations, migrations, conquests, territorial changes, or social conditions.

#### 12. 13. Music.

# 12. Harmony.

The examination will be adapted to the proficiency of those who have studied Harmony in a systematic course of three lessons a week through one school year. Proficiency in pianoforte playing, and the ability to read chorals and moderately easy piano pieces at sight will be required. The work should consist partly of exercises written on figured basses in which all the triads and seventh-chords are to be employed progressively, and partly of the harmonization of simple melodies. Exercises must be written in a clear and well-formed notation. The course will embrace:

- 1. Notation; Clefs; Signatures; Diatonic and Chromatic Intervals and their inversions; Consonance and Dissonance; Major and Minor diatonic scales; Chromatic Scale; Natural Harmonic Series.
  - 2. Triads of the Major and Minor modes.
- 3. Rules of Chord-connection; Range of voices; Open and Close harmony; Tonality.
- 4. Inversions of Triads; Principles of doubling voices in chords, especially in successive Sixth-chords.
- 5. Chords of the Dominant Seventh, Dominant Ninth, and Diminished Seventh; Preparation and Resolution.
  - 6. Secondary Seventh-chords; Altered Chords; Augmented Chords.
  - 7. Suspensions.
  - 8. Passing and Changing notes; Pedal Point.
  - 9. Principles of key-relationship; Simple modulation.

Shepherd's Harmony is recommended as a text-book.

## 13. Counterpoint.

The examination will be adapted to the proficiency of those who have studied Counterpoint in a systematic course of three lessons a week through one school year, and presupposes training in pianoforte playing. As counterpoint applies the principles of harmony to the melodious treatment of the several voice-parts in combination, and as the art of musical composition begins properly with this study, the work should consist principally of written exercises on given themes, in the following order: — Chorals and melodies harmonized, with a free use of passing notes; the several orders of Counterpoint in two, three, and four voices, with and without cantus firmus; Double Counterpoint; Free Imitative Counterpoint; Analysis of the Two-part Inventions of Sebastian Bach; Simple forms of free composition, Organ Preludes, Two-part inventions, and Part Songs.

Students should use as models simple organ compositions and part-songs of modern composers. For the exercises in counterpoint the alto and tenor clefs should be used.

#### 14-17. Mathematics.

A thorough practical acquaintance with ordinary Arithmetic is assumed as underlying all preparation in Mathematics. Knowledge of the fundamental principles of Arithmetic and careful training in accurate computation with whole numbers and with vulgar and decimal fractions form an essential part of early school work. But the pupil's time should not be wasted in the solution by arithmetic of puzzling problems which properly belong to algebra, or in complicated and useless reductions, or in the details of commercial arithmetic. It is desirable that some familiarity with algebraic expressions and symbols, including the methods of solving simple equations, be acquired in connection with the course in Arithmetic.

# Elementary Mathematics.

14. Elementary Algebra.—Algebra, through Quadratic Equations. The requirement in Algebra includes the following subjects: factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theo-

rem for positive integral powers of the binomial, and the extraction of roots; arithmetical and geometrical progressions; putting questions into equations and the reduction of equations; the ordinary methods of elimination and the solution of both numerical and literal equations of the first and second degrees with one or more unknown quantities and of problems leading to such equations.

The student should cover carefully the whole ground here specified, and should acquire a thorough understanding not only of the practice, but of the reasons involved in the elementary algebraic rules; for example, in the rules of multiplication, of signs, and of exponents, in the rules for fractions, and in those relating to the reduction and solution of equations. She should train herself to practical skill by the solution of a large number of examples, and should learn to do her work with reasonable quickness, as well as with confidence, accuracy, and clearness. The solution of fairly complicated literal quadratics, the various methods of elimination for equations of the first two degrees, the putting of problems in a neat manner into equations, and the working of the various algebraic operations both for integral and fractional expressions may be mentioned as important subjects of attention. The student should be taught to arrange her work in a clear, orderly, and compact fashion.

The time supposed to be devoted to the systematic study of the requirement in Algebra is the equivalent of a course of three lessons a week through two school years.

15. Geometry.— Plane and Solid Geometry, including problems in mensuration of plane and solid figures, and original propositions in Plane Geometry.

Geometric education should begin in the kindergarten or primary school, where the child should acquire familiarity through the senses with simple geometric forms, by inspecting, drawing, modelling, and measuring them, and noting their more obvious relations. This study should be followed, in the grammar school, by systematic instruction in Concrete (or Observational) Geometry, of which geometric drawing should form a part. Such instruction should include the main facts of Plane and Solid Geometry, treated as matters of observation, and not as exercises in logical deduction, without however necessarily excluding the beginnings of deductive proof as soon as the pupil is ready for them. Concrete Geometry is believed to have important educational value, and to prepare an excellent foundation for the later study of Formal Geometry. It belongs, however, to the earlier stages of school work, and should not be postponed until the time that belongs to direct preparation for college or the scientific school.

In teaching Formal Geometry, stress should be laid from the outset on accuracy of statement and elegance of form, as well as on clear and strict reasoning. As soon as the pupil has begun to acquire the art of rigorous demonstration, her work should cease to be merely receptive, she should be trained to devise constructions and demonstrations for herself, and this training should be carried through the whole of the work in Plane Geometry. Teachers are advised, in their selection of a text-book, to choose one having a clear tendency to call out the pupil's own powers of thought, prevent the formation of mechanical habits of study, and encourage the concentration of mind which it is a part of the discipline of mathematical study to foster. The subject of Geometry, not a particular treatise, is what the pupil should be set to learn; and its simpler methods and conceptions should be made a part of her habitual and instinctive thought. Lastly, the pupil should be stimulated to good work by interest in the study felt and exhibited by the teacher.

The requirement in Geometry embraces the following topics: the general properties of plane rectilinear figures; the circle and the measure of angles; similar polygons; areas; regular polygons, and the measure of the circle; the relations of planes and lines in space; the properties and measure of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle. The propositions required under these several heads are those only which are contained in the older treatises, and which are recognized as constituting the Elements of Geometry. The examination does not include the additions introduced into some recent text-books, although most of those additions are in themselves valuable for the student who has time and taste for extra study in this field. A syllabus of the required propositions has been prepared. [This syllabus may be obtained, price 10 cents, at the Publication Office, 2 University Hall, Cambridge.]

The examination in Geometry also includes original propositions in Plane Geometry, based on the propositions named in the syllabus, and problems in mensuration in both Plane and Solid Geometry; but excellence in bookwork and in exercises immediately illustrating bookwork will be allowed to offset in part any lack of skill in original work.

The time which it is recommended to assign to the systematic study of the requirement in Formal Geometry is the equivalent of a course of five lessons a week for one school year; but it is believed to be advisable to extend this allowance of time over two years.

# 15a. Plane Geometry.

The requirement in Plane Geometry is stated on pages 1-14 of the Syllabus mentioned above.

#### Advanced Mathematics.

15b. Solid Geometry. — Chauvenet's Geometry, Revised and Abridged (Philadelphia: J. B. Lippincott & Co.), Books VI, VII, VIII, and IX, will serve to indicate the nature and amount of the requirement in Solid Geometry.

**16.** Logarithms and Trigonometry.—The theory of logarithms and the use of logarithmic tables.—Plane trigonometry.—The solution of the right spherical triangle.—Applications to simple problems.

No technical knowledge of the subjects of surveying and navigation, such, for instance, as the methods of parallel or middle latitude sailing, will be required, but such terms as latitude, longitude, angle of elevation or depression, bearing, etc., should be understood. At the examination, candidates are furnished with four-place tables belonging to the University, and are not allowed to use their own tables. The tables provided are distributed before the hour of examination, so that candidates may have at least an hour for becoming acquainted with their arrangement and use. Teachers who wish a still earlier opportunity of seeing these tables should write to the Secretary of Radcliffe College.

# 17. Advanced Algebra.

The requirement in Advanced Algebra includes the following subjects:

- (a) Simultaneous quadratics and equations solved like quadratics; properties of quadratic equations; addition, subtraction, multiplication and division of complex quantities; inequalities; variations; arithmetical and geometrical progressions; mathematical induction; simple problems in choice and chance; continued fractions; scales of notation.
- (b) Determinants, not including the multiplication theorem; simple applications of determinants to linear equations; the solution of numerical equations of higher degree, and so much of the theory of equations (not including multiple roots or Sturm's theorem) as is necessary for this purpose.

The topics included under (a) may be treated briefly. About half the time devoted to the requirements should be spent on the topics included under (b).

# 18-24. Physical Science.\*

# Elementary Physical Science.

18. Elementary Physics.—A course of study dealing with the leading elementary facts and principles of physics, with quantitative laboratory work by the pupil.

The instruction given in this course should include qualitative lectureroom experiments, and should direct especial attention to the illustrations
and applications of physical laws to be found in every-day life. The candidate is required to pass a written examination, the main object of which
will be to determine how much she has profited by such instruction. This
examination may include numerical problems. It will contain more questions than any one candidate is expected to answer, in order to make
allowance for a considerable diversity of instruction in different schools.

The pupil's laboratory work should give practice in the observation and explanation of physical phenomena, some familiarity with methods of measurement, and some training of the hand and the eye in the direction of precision and skill. It should also be regarded as a means of fixing in the mind of the pupil a considerable variety of facts and principles. The candidate is required to pass a laboratory examination, the main object of which will be to determine how much she has profited by such a laboratory course.

The candidate must name as the basis for her laboratory examination at least thirty-five exercises selected from a list of about sixty, described in a publication issued by Harvard University under the title, "Descriptive List of Elementary Exercises in Physics." [This list may be obtained, price 40 cents, at the Publication Office, 2 University Hall, Cambridge.] In this list the divisions are mechanics (including hydrostatics), light, heat, sound, and electricity (with magnetism). At least ten of the exercises selected must be in mechanics. Any one of the four other divisions may be omitted altogether, but each of the three remaining divisions must be represented by at least three exercises.

The candidate is required to present a note-book in which she has recorded the steps and the results of her laboratory exercises, and this notebook must bear the endorsement of her teacher, certifying that the notes

<sup>\*</sup>For rules relating to the time of handing in note-books and to candidates examined in June in places where no laboratory examination is provided, see p. 32.

are a true record of the pupil's work. It should contain an index of the exercises which it describes. These exercises need not be the same as those upon which the candidate presents herself for the laboratory examination, but should be equivalent to them in amount and grade of quantitative work.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in physics. Experience has shown that pupils can make the original record of their observations entirely presentable, so that copying will be unnecessary, and they should in general be required to do so.

This course, if taken in the last year of the candidate's preparation, is expected to occupy in laboratory work, recitations, and lectures, five of the ordinary school periods, about fifty minutes in length, per week for the whole year. With few exceptions exercises like those in the Descriptive List already mentioned can be performed in a single school period, but for satisfactory results it will often be necessary to repeat an exercise. Two periods per week for the year should be sufficient for the laboratory work proper. If the course is begun much earlier than the last year of the candidate's preparation, as it well may be, it will require more time.

19. Chemistry.\*—A course of at least sixty experiments, performed at school by the pupil and accompanied with systematic instruction in principles and their applications, in accordance with directions given in a pamphlet entitled "An Outline of Requirements in Chemistry," issued by Harvard University for the use of teachers only.

The candidate is required to pass both a written and a laboratory examination. The written examination will test her acquaintance with the facts and principles of Chemistry. The laboratory examination will test both her skill in performing experiments and her grasp of the principles involved in them. The candidate is further required to present the original note-book in which she recorded the steps and results of the experiments which she performed at school, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes.

The note-book is required as proof that the candidate has formed the

<sup>\*</sup>The course will be mainly an experimental course in theoretical chemistry, but there will be experiments covering all branches of pure chemistry.

habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in Chemistry.

**20.** Physiography.—A course of study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Physiography," issued by Harvard University.

For the form of examination see note under Astronomy, below.

**21.** Anatomy, Physiology, and Hygiene.—A course of study and laboratory work equivalent to that described in a pamphlet entitled "An Outline of Requirements in Anatomy, Physiology, and Hygiene," issued by Harvard University.

The candidate will be required to pass both a written and a laboratory examination. The written examination will test the range and thoroughness of her knowledge of the elements of Anatomy, Physiology, and Hygiene. The laboratory examination will test (a) her ability to perform the experiments described in the Outline of Requirements, and (b) her knowledge of the first aids to be rendered to the injured.

At the time of the laboratory examination the candidate must present the original note-book containing (with dates) the notes and drawings she has made in the course of her laboratory work, and bearing the endorsement of her teacher, certifying that the book is a true record of the pupil's own observations and experiments. An index of subjects should be appended.

# Advanced Physical Science.

# 22. Advanced Physics.\*

The University does not prescribe the experiments to be performed by those offering this subject for admission. The work should, however, be of advanced grade, almost wholly quantitative, and conducted with apparatus, not necessarily elaborate, yet capable, if carefully handled, of yielding results of such accuracy as to warrant the consideration of somewhat minute error. For example, the balance used in weighing should be so delicate

<sup>\*</sup>Equivalent to, but not necessarily identical with, Physics C.

as to justify corrections for the buoyancy of the air on the weights and on the body weighed, and, in the determination of specific gravity, for the temperature of the water. The results should be discussed with reference to their precision and to the number of significant figures. There should be about sixty experiments well distributed through the range of general physics. If the student has devoted a considerable amount of time in the elementary course to experiments in heat, that division of physics may be here omitted. The laboratory work can be performed properly only in periods of considerable length, two to four hours, for example.

Instruction by lectures or text-books and work in problems should be a part of the course.

The candidate will be required to pass both a laboratory and a written examination. She should so thoroughly understand the work which she has performed as not to be confused in the laboratory examination by unfamiliar forms of apparatus.

The laboratory note-book will receive careful attention at the time of the examination. It must contain a certificate from the teacher that it is a true record of the candidate's work.

23. Meteorology.—A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Meteorology," issued by Harvard University.

This course requires a knowledge of Elementary Physics. (For the form of examination see under Astronomy, below.)

**24.** Astronomy.—A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Astronomy," issued by Harvard University.

This course requires a knowledge of Geometry.

In Physiography, Meteorology, and Astronomy, the candidate will be required to take both a written and a laboratory or practical examination. The written examination may test her understanding of observational methods appropriate to the subject, but will call chiefly for a knowledge of facts and principles. The laboratory or practical examination will test her skill in observation as well as her grasp of principles. This examination can be taken in Cambridge only; for those who are examined elsewhere in June, it will be postponed to September.

The laboratory examination in Physiography may include the description, explanation, and comparison of geographical features shown in photographs,

maps and models. The laboratory examination in Meteorology may include the use of instruments, the discussion of observations, and the construction and interpretation of weather maps and climatic charts. The practical examination in Astronomy may call for an ability to make simple nakedeye and instrumental observations, and to establish the simpler generalizations of astronomy by discussion of these observations.

The candidate in these subjects will be required to present, at the time of the laboratory or practical examination, the original note-book in which she recorded, with dates, the steps and results of the observations which she made at school. This book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. An index of subjects should be appended. The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of her work through an extended course of observational study, and that her work has been of a satisfactory character; but greater weight will be given to the practical or laboratory examination than to the note-book in determining the candidate's attainments.

#### LABORATORY EXAMINATIONS.

A candidate who is examined in any study in which a laboratory examination is held will hand in her laboratory note-book at the hour of the laboratory examination. Laboratory note-books will be deposited, after examination, in the Secretary's office, where they will be kept for a reasonable time, subject to the order of the owners.

A candidate examined in June at any place where a laboratory examination is not provided will be required to take such an examination in Cambridge in the autumn of the year in which she enters College; but if she passes the written examination in June, the subject will be temporarily counted in her favor in determining the question of her admission to College. Similarly, a Preliminary candidate is allowed to postpone her laboratory examination until September of the year in which she enters College.

#### EXAMINATION PAPERS.

A set of recent examination papers will be sent free to any address, on application to the Secretary.

#### DIVISION OF THE EXAMINATION.

A candidate for admission may take the entire examination at one time; or she may divide it under conditions named below, (1) between two years, or (2) between June and September of the same year, or (3) between June of one year and June and September of a second year. If she divides it between two years she is known in the first year as a "Preliminary Candidate"; if she divides her whole examination, or, having passed a Preliminary Examination, the examination of her second year between June and September of the same year, she is known as a "Postponing Candidate." A Preliminary Examination is always taken a year or more before the Final Examination. Postponing candidates, whether in September or in June, are taking Final Examinations.

In each study numbered in bold-faced type (1, 2, 3, etc.) there is one examination which cannot be divided.

#### PRELIMINARY EXAMINATION.

For a Preliminary Examination the candidate must present herself in June, having previously sent in a certificate of preparation.

A Preliminary certificate will be granted to any candidate who passes the examination in studies rated in the aggregate at *eight* points.

Candidates may offer themselves for the Preliminary Examination in any studies, Elementary or Advanced, in which their teachers certify that they are prepared, and in no others.

## OPTIONAL EXAMINATIONS. ANTICIPATION OF COLLEGE STUDIES.

In addition to the examinations required for admission to Radcliffe College, optional examinations are provided for such candidates as have extended their studies beyond the requirements.

- I. A candidate may present herself for examination in any of the studies not offered by her for admission, and thus qualify herself to pursue more advanced courses in those subjects in College.
- II. A candidate may present herself for additional examination in one or more of the following studies: (a) any prescribed course or courses of the Freshman year (see p. 34); (b) any elective course or courses intended primarily for undergraduates, provided the courses are of such a character that they may properly be anticipated by examination (see p. 34).

Studies anticipated may be counted toward the degree of Bachelor of Arts in the manner herein provided; but the grade of scholarship attained in an anticipated study is not counted toward distinction or honorable mention with the degree:—

- (1) If the studies anticipated amount to one half of the work of the Freshman year, the student may, upon application, be admitted to the Sophomore class, subject to the condition of making up the deficiency in her Freshman Studies.
- (2) In any case, the studies anticipated shall be placed to the student's credit, and may be used towards satisfying the requirements for the degree of Bachelor of Arts, in either of the following ways:—
- (a) The student may obtain leave from the Academic Board to fulfil the requirements for the degree in three years by taking additional elective studies.
- (b) The student may obtain leave from the Academic Board to reduce the number of courses required in the Senior year, or in the Senior and Junior years, by the amount of the studies anticipated.

Applications under (a) and (b) will not ordinarily be acted upon until the close of the student's first year; and the decision upon them will depend upon the quality of the student's record both in her examination for admission, and in her College work.

### EXAMINATIONS IN PRESCRIBED FRESHMAN STUDIES.

Applicants for advanced standing (see below) and candidates anticipating Freshman studies are examined in the following studies, which correspond to the prescribed studies of the Freshman year.

- 1. English.\* The examination in English A corresponds to the admission examination in English, (b) English (see page 11).
- 2. German or French (whichever the student did not offer at the examination for admission). The examinations in German A and French A correspond to the admission examinations in Elementary German and French (see pp. 19, 20).

#### EXAMINATIONS IN ELECTIVE STUDIES.

Examinations in elective studies that are not equivalent to admission studies are held only in the first fortnight of the academic year and only

\*Elective courses in English are open, on the same terms as to Sophomores, to students who have anticipated the prescribed English of the Freshman year.

at Cambridge. Written notice of intention to take these examinations must be in the hands of the Secretary not later than September 10. The examinations in such elective studies as correspond to admission studies are identical with the examinations in the latter, and must be taken at the same times and places.

#### Admission to Advanced Standing.

Students may be admitted to advanced standing either (I.) by examination, or (II.) from other colleges without complete examination.

- I. By Examination. A candidate may be admitted to the Sophomore, Junior, or Senior Class, if she appear on examination to be versed in the following studies:—
  - 1. The studies required for admission to the Freshman Class (pp. 8-32).
- 2. All the prescribed studies already pursued by the class for which she offers herself, and as many elective studies as she would have pursued if she had entered at the beginning of the course.

Examinations for advanced standing are held in such courses only as are intended primarily for undergraduates; and, among these, in such only as may reasonably be anticipated by examination. No laboratory course, no course in composition or discussion, and no other course in which an examination is obviously an inadequate test may be offered for admission to advanced standing.

A candidate may be admitted in spite of deficiencies in some of these studies; but no candidate so admitted is recommended for the degree until she has made good her deficiencies to the satisfaction of the Academic Board.

Candidates for admission to advanced standing may divide the examination between June and September.

For the times and the places of examinations, see pages 49, 50, 52.

The Secretary must receive, not later than September 10, a written notice specifying the elective course or courses in which the candidate wishes to be examined.

II. WITHOUT COMPLETE EXAMINATION. Graduates of other colleges and students who have completed creditably the work of the first two years at other colleges may be admitted without examination, and assigned to

those classes for which their previous training seems to qualify them. Every case is decided on its own merits. A student who has completed with credit the work of the Freshman year at another college may be admitted as a Special Student (see below) with the understanding that, after the results of her work for at least one year are known to the Committee, she shall be assigned to such regular standing as may seem proper.

Applications are acted upon at any season of the year. Every person wishing to enter Radcliffe College under this provision must make a complete written statement of the work on which she bases her application. In this she should state how old she is; at what school or schools she received her preparatory training; how long she attended each school; what she studied; how much time she gave to each of the more important studies; and how far she advanced in each before she entered college.

Blank forms of application for admission to advanced standing without complete examination may be obtained from the Secretary.

Much importance is attached to the quality of the work offered. The applicant should furnish (1) official statements of her rank or grade in her various college studies; (2) letters, or other evidence, showing the opinion her instructors have formed of her character and scholarship, (3) a letter of honorable dismissal from the college whence she comes.

Candidates from other colleges may be admitted to Radcliffe College in spite of some deficiencies in their work, on condition that they shall make good these deficiencies before receiving the degree. Deficiency in one direction may be offset by unusual attainments in another.

## SPECIAL STUDENTS.

Applicants who pass a satisfactory examination on a smaller number of subjects than are called for in the full Requirements may be admitted, at the discretion of the Academic Board, to such special courses as they seem qualified to pursue.

Students of mature age, who wish to pursue chiefly higher courses of study, may be admitted, at the discretion of the Academic Board, without passing the examination for admission, provided that they satisfy the instructors in the courses which they elect of their fitness to pursue them.

Every special student is expected to take four courses of study.

Special students may, on application, receive, at the end of their term of study, certificates stating the courses in which they have passed satis-

factory examinations, and giving the grade to which they have been assigned in each course.

Special students should make application before the first day of September.

#### STUDENTS AND EXAMINATIONS.

Undergraduates are expected to make their choice of elective studies before the first day of September, and no changes are allowed after October 1, except by leave of the Academic Board. Applications for changes must be made to the Academic Board in writing, with a statement of reasons.

The student's choice is limited to those studies which her previous training qualifies her to pursue; and she must observe any restrictions that may be attached to the particular courses she wishes to select. She is further required to avoid any conflict of recitation hours or of examinations between her courses.

No starred (\*) course may be chosen without the *previous* consent of the Instructor. Application should be made, if possible, before the summer vacation.

An undergraduate who wishes to take a Graduate course is required to consult the Instructor in advance; if possible she should do this before the summer vacation. She will be admitted to the course on the recommendation of the Instructor, which must be given in writing.

Not more than one Course of Research may be taken in any year by an undergraduate.

All students are expected to attend all the exercises and to pass all the examinations in the courses which they elect, unless excused by special vote of the Academic Board. Applications for excuses must be made to the Secretary in writing with the reasons.

#### LODGINGS FOR STUDENTS.

Students may learn of lodging-places approved by the Students' Committee by enquiring of the Dean. The ladies of the Standing Committees will be glad to assist students by their advice.

Bertram Hall, the first hall of residence in Radeliffe College, was opened in 1901. It provides accommodations for twenty-five students and is under

the charge of a resident mistress, Miss E. M. Hoppin. The hall is situated in Shepard Street, seven minutes walk from Radcliffe College. The price of board is \$6.00 a week for the 36 weeks from the last Wednesday in September to the day before Radcliffe Class Day, exclusive of the Christmas and the Spring recess, as fixed by the college catalogue. Students may remain until the day after Radcliffe Commencement on payment of \$6.00 for the week's board. The charge for rooms is from \$100. up. These charges include all expenses of furnishing, service, heating and light, except open fires and washing. Applications for rooms in Bertram Hall must be sent before May 1st to Mr. John F. Moors, 111 Devonshire St., Boston.

All arrangements for boarding and lodging are to be subject to the approval of the Dean, and the Secretary must be kept constantly informed of the address of every student.

### GRADUATE STUDENTS.

#### Admission.

Bachelors of Arts of Radcliffe College, and Graduates of other Colleges of good standing who present satisfactory evidence of character and qualifications, are admitted without examination as Graduate Students in Radcliffe College.

An application for admission may be made by filling a registration blank and depositing it at the office. If the applicant is not a graduate of Radcliffe College, she must also file, for the consideration of the Academic Board, satisfactory certificates of scholarship and character; and if she holds a degree from any institution, she must present diplomas or official certificates, sufficient to furnish evidence of her holding such degree or degrees.

Admission as a Graduate Student does not imply admission to candidacy for a Degree.

Graduate Students, not Bachelors of Arts of Radeliffe College, who wish to become candidates for any degree, should make early application to learn the conditions under which they may be accepted as qualified for candidacy.

#### RESIDENCE.

Graduate Students are required to be in regular attendance on the exercises in some course or courses of instruction, and to do all the required

work (including all examinations) in the courses which they elect; or to carry on regular work in some Laboratory or Museum or in the Library, under the frequent inspection and criticism of some specified instructor or instructors.

#### STUDIES.

The instruction open to students in Radcliffe College is arranged in one list of Courses of Instruction, consisting of Full Courses and Half-Courses. These are distributed into *three groups* in the several branches of study, namely,

- (1) Courses designed primarily for Undergraduates.
- (2) Courses for Graduates and Undergraduates.
- (3) Courses primarily for Graduates.

Any course (or half-course) in the list is open to all Graduate Students who present sufficient evidence of qualification for that course. It is sometimes advisable, and is not unusual, for a Graduate student to choose some of her studies from the First, or Undergraduate, Group; but such studies are not ordinarily counted for the degree of A. M. Many of the studies of the Second Group are distinctly of Graduate grade, in the sense of being in advance of such as are ordinarily pursued for a Bachelor's degree. They are thorough and comprehensive courses, characterized by advanced methods of instruction and study; and are in fact largely chosen by Graduate Students, and found suitable to their needs. To some of these courses, undergraduates are admitted only by special leave of the instructor. To the courses of the Third Group, undergraduates are admitted only on the recommendation of the instructor.

Among the higher courses of instruction—of the Second and Third Groups—in nearly every department of study, are Courses of Research and Seminaries, for students who wish to do special work of an advanced character. These courses are carried on under various plans of administration in the several departments, but always with the object of affording opportunity for regular independent study.

A complete year's work for a Graduate Student regularly consists of four full courses of instruction, of advanced grade, or of their equivalent in courses and half-courses, pursued with high credit throughout an academic year. All the work required in such courses must be done, and all the examinations must be passed; unless the student has leave from the Academic Board, with the approval of the Instructor, to omit some part of the ordinary requirement.

A student who wishes to devote her time, largely or wholly, to special study of an advanced character may count a course embracing such study as equivalent to more than one course, up to a complete year's work, or may carry on such study outside and in place of the regular courses, under the direction and supervision of some specified instructor or instructors. In either case, the substitution proposed must have the approval or consent of the Instructor or Instructors concerned; and the permission of the Academic Board is required.

#### DEGREES.

The requirements for the degrees of Bachelor of Arts and Master of Arts are as follows:

In order to be recommended for the degree of Bachelor of Arts, a candidate must have passed in studies amounting to sixteen courses, together with such work in English as may be prescribed for her; making a total of seventeen or seventeen and a half courses, as the case may be. She must, moreover, have attained a grade above D in at least two-thirds of all the work done by her in Radcliffe College in satisfaction of the requirements for the degree.

An undergraduate must take, in each academic year, at least four courses, in addition to such work in English as may be prescribed for her; and (including her prescribed English) she may take five, but not more, as regular courses to be counted towards the degree. Certain studies taken in the Harvard Summer School may also be counted towards the degree.

The ordinary requirement for the degree of Master of Arts for a graduate of a college of good standing consists of at least one year of residence and study devoted to advanced work approved by the Academic Board of Radcliffe College as affording suitable preparation for the degree and completed with high credit. Other persons will be admitted to the degree on conditions to be determined in each case.

The programme of study for the degree of Master of Arts must form a consistent plan of work pursued with some definite aim, though it need not lie wholly in one Department or field. This work may be done either in, or in connection with, the regular courses of instruction, or independently of them. In the latter case it must be carried on under the guidance of some specified instructor.

No student may count for the degree of Master of Arts courses which she has taken as an undergraduate.

All diplomas are countersigned by the President of Harvard University and bear the University seal.

#### TUITION FEES.

The annual tuition fee for a student doing full work is two hundred dollars, in addition to the special laboratory fees named below. It is payable, one hundred and twenty-five dollars on October 1, seventy-five dollars on February 1.

For those students who are permitted by the Academic Board to take less than four courses, two-thirds of the fee is payable on October 1, the remaining third on February 1. The charges are as follows:—

For any regular course, not a laboratory course of course of research, sixty dollars; for any half-course, not a laboratory course, thirty dollars; for a course of research or for a laboratory course, besides the special laboratory fees, a sum equal to the fee for one, two, or more courses, according to the number of courses to which the Academic Board shall consider it equivalent as part of the student's work for the year. But the minimum fee charged for any student is forty dollars, and the maximum fee, in addition to the special laboratory fees, is two hundred dollars, covering any number of courses that a student is permitted to take.

Students in laboratory courses pay in addition a special laboratory fee of five dollars for each course and of five dollars or two and a half dollars for each half-course.

No student will be admitted for any shorter time than a whole academic year, except by special vote of the Academic Board.

A student doing full work and therefore liable for the full tuition fee of two hundred dollars is entitled to a partial remission of fee in case of properly notified withdrawal from college or protracted absence, as follows: If she withdraws in the course of the academic year she is charged only to the end of the third in which she withdraws, provided that before that time she gives written notice of her withdrawal to the Dean; otherwise she is charged to the end of the third in which such written notice is given.

If she is absent with the consent of the Academic Board for three consecutive months she is entitled to a deduction of fifty dollars from the year's tuition fee; if she is absent for the whole year, not including the midyear and final examinations or either of them, she is entitled to a deduction of one hundred and fifty dollars provided she has given in either case previous notice of her intended absence to the Secretary.

In the case of students liable for less than the full fee of two hundred dollars no deduction is made for absence or withdrawal.

No student is entitled to a reduction of fee on account of withdrawal from a course or courses after the year has begun unless she withdraws from the college and then only if she has been doing full work.

No claim for deduction of fee will be considered if presented after the close of the Academic year in which the absence or withdrawal took place.

No student is permitted to attend any college exercise after October 15th in any year unless all bills previously rendered for that year have been paid; and similarly no student is permitted to attend any College exercise after March 1st unless all bills previously rendered have been paid; and in no event is any degree conferred unless all dues to the College have been paid at least twenty-four hours before Commencement Day.

# THE CHARLES ELIOT NORTON FELLOWSHIP IN GREEK STUDIES.

In 1902, James Loeb, of the Class of 1888, gave securities valued at fourteen thousand one hundred dollars for the permanent establishment of this fellowship, which he had maintained during the year 1901–02, "in grateful recognition of the long and great friendship which Professor Norton has shown him since his boyhood, and in order to record in a fitting manner the eminent services which Professor Norton has rendered the cause of Archæology, and his beneficent prominence in the Archæological Institute of America and the American School of Classical Studies at Athens."

Competition for the fellowship is open to members of the Senior Class in Harvard College and of the Graduate School of Harvard University, and to Seniors and Graduate Students in Radcliffe College. It has an annual income of six hundred dollars.

The award will be made by a committee appointed by the Department of the Classics, of which committee Professor Norton is to be a member during his life, on the basis (1) of a thesis on a subject approved by this committee, and (2) of such other evidence of scholarship as may be accessible. In the award, no account is be taken of the financial means of the competitor; and no award will be made in case the these offered are not of sufficient merit.

The editors of the Harvard Studies in Classical Philology are to have the right to publish the thesis of the successful candidate.

The incumbent of the fellowship must agree to pursue his studies for the year of his incumbency at the American School of Classical Studies at Athens, and to devote himself to the study of some special subject approved by the committee, in the field of Greek History, Literature, Art, Archæology, Epigraphy, or Topography. He shall also agree to write and publish, at the end of the year of his fellowship, a monograph embodying the results of his investigations.

In accordance with the terms of the fellowship, the award will be made in the Spring of 1905, for the academic year 1905-06. The following subjects for theses are proposed by the Committee:—

Greek Conceptions of a Future Life as illustrated by Works of Art.

The Dramatic Art of Euripides.

The Part taken by Women in Greek Cults.

The International Aspects of Greek Commerce.

The Influence of Greek Plastic Art on Greek Tragic Poetry.

Candidates may, however, with the consent of the Committee, write on other classical subjects.

Applications for admission to candidacy must be made to the Chairman of the Department of the Classics not later than December 1, 1904; and the theses of approved candidates must be presented to the Chairman not later than March 1, 1905.

#### SOUTH END HOUSE FELLOWSHIP.

Miss Annette Peabody Rogers has established in Radcliffe College for two years a fellowship to be called "The South End House Fellowship," to be devoted to the promotion of the study of social problems by women. The amount of the fellowship will be four hundred and fifty dollars a year, in addition to such tuition charges at Radcliffe College as the incumbent of the fellowship incurs.

The fellowship will be provided subject to the following conditions:

- 1. The incumbent to be registered as a graduate (or special) student in Radcliffe College, but to be in residence during eleven months in the year at the South End House (Women's Residence) in Boston.
- 2. The incumbent to be nominated each year by the Dean of Radcliffe College and the Professor of Sociology, in conference with the Head of the South End House and the donor of the fellowship.
- 3. The incumbent to devote not less than one-half of her working time to the original investigation of some concrete problem of the city life in Boston under the direction of the Professor of Sociology, in conference with the Head of the South End House.

4. Preference to be given, among candidates equally deserving, to the graduates of Radcliffe College; but the fellowship to be open to graduates of other colleges, and full completion of a college course not to be an indispensable requirement if there are other evidences of special fitness.

In 1904-05 this fellowship was awarded to Charlotte Henrietta Price of the class of 1901.

## SCHOLARSHIPS.

Applications for scholarships should be addressed to the Dean of Radcliffe College, and should be in the hands of the Dean on or before the first of June, 1905.

#### THE EDWARD AUSTIN SCHOLARSHIPS.

In 1899, the sum of \$25,500 was received by Radcliffe College in settlement of the bequest of \$30,000, made by Edward Austin, the income thereof to be paid to "needy, meritorious students and teachers, to assist them in payment of their studies."

In 1900 the heirs of Edward Austin gave \$2,250 to be added to this fund. For the year 1904–05 five scholarships were awarded from the income of this fund.

One scholarship of \$200 to Mabel Jencks (Colorado College) A. B. 1904. One scholarship of \$200 to Lois Kimball Matthews (Leland Stanford Junior University), A. B. 1903, A. M. 1904.

One scholarship of \$200 to Eleanor Harris Rowland, A. B. 1903, A. M. 1904.

One scholarship of \$200 to Marjorie True Gregg of the class of 1905. One scholarship of \$200 to Ethel May Winward, a special student.

## THE HARVARD ANNEX SCHOLARSHIP.

By gift of the Alumnae and students of the "Harvard Annex" and their friends, an annual scholarship has been established to be known as "The Harvard Annex Scholarship founded by Alumnae of Radcliffe College." The fund provides for the tuition fees of one student.

In 1904-05 this scholarship was awarded to Mary Fairfield Coit (College for Women of Western Reserve University) B. L. 1896, (Radcliffe College) A. M. 1904.

## THE ELLEN M. BARR SCHOLARSHIPS.

By the terms of the will of the late Ellen M. Barr, the residue of her estate, after the payment of debts and legacies, was bequeathed to Radcliffe College. Subject to the payment of an annuity, the income of this bequest is to be applied "in the form of annual scholarships of not less than two hundred and fifty dollars and not more than three hundred dollars each, for the benefit of students in Radcliffe College, who, in point of character, ability and physical constitution, give promise of future usefulness, and who stand in need of pecuniary assistance."

In 1904-05 five scholarships from this fund, of the value of \$250 each were awarded to Anna Johnson (*University of South Dakota*) A. B. 1903, (*University of Iowa*) M. S. 1904; and to Emily Frances Hunt, Jennie Alice Law, Mary Grace Nelson, and Mary Lilian Smith, of the class of 1905.

#### THE ELLA LOWELL LYMAN MEMORIAL SCHOLARSHIP.

By gift of Mr. Arthur T. Lyman of Boston, an annual scholarship has been established in memory of his wife, Ella Lowell Lyman. The fund provides for the tuition fees of one student.

In 1904-05 this scholarship was awarded to Constance Fuller of the class of 1907.

#### THE ELIZABETH CARY AGASSIZ SCHOLARSHIP.

The Elizabeth Cary Agassiz Scholarship is a gift to Radcliffe College from various friends of Mrs. Agassiz, who wished that it should bear her name. The fund provides for the tuition fees of one student.

In 1904-05 this scholarship was divided between Alice Burchard Pickett and Mabel Collin Osborne, both of the class of 1907.

#### THE AGNES IRWIN SCHOLARSHIP.

By gift of six hundred and eighty former pupils of the first Dean of Radeliffe College, the Agnes Irwin Scholarship has been established. By the terms of the gift the student to have the benefit of this scholarship is to be appointed by Miss Agnes Irwin, and all details regarding it are to be arranged by her for the present and the future. The fund provides for the tuition fees of one student.

In 1904-05 this scholarship was awarded to Ethel Merrill Howard, a special student.

## THE WIDOW JOANNA HOAR SCHOLARSHIP.

The College has established The Widow Joanna Hoar Scholarship with funds contributed by an unknown friend in memory of the widow of Charles Hoar, Sheriff of Gloucester in England, who came to America with her children in 1638. In awarding this scholarship preference is to be given to natives of Concord, Mass., or to daughters of citizens of that place. The fund at present provides for the tuition fees of one student.

In 1904-05 this scholarship was awarded to Marie Caroline Bass of the class of 1906.

#### THE MARIA DENNY FAY MEMORIAL SCHOLARSHIP.

An annual scholarship of two hundred dollars (\$200) has been established, which provides for the tuition fees of one student.

In 1904-05 this scholarship was awarded to Julia Theresa Connor of the class of 1906.

#### THE JOSIAH M. FISKE MEMORIAL SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske, of New York City, an annual scholarship has been established in memory of her late husband, Josiah M. Fiske, who was once a resident of Cambridge. The fund provides for the tuition fees of one student.

In 1904-05 this scholarship was awarded to Marian Bullard Healey of the class of 1906.

#### THE CANTABRIGIA SCHOLARSHIP.

The Cantabrigia Scholarship was founded in 1903 from a gift of \$2500 made by the Cantabrigia Club of Cambridge. The income provides one-half the tuition fee and will be awarded by preference to a resident of Cambridge.

## PRIZES.

#### THE SARGENT PRIZE.

This prize was first offered in 1886-87 by John Osborne Sargent of New York, of the class of 1830, and was endowed in his memory, in 1892, by his daughter, Georgiana W. Sargent. The prize is of one hundred dollars, and is offered for the best metrical translation of a lyric poem of Horace, to be selected each year by the Department of the Classics.

The selection for 1905 is the third Ode of the second Book.

Undergraduates of Harvard College and of Radcliffe College may compete for this prize. The prize may be withheld if no competitor appears to deserve it.

The versions must be neatly and legibly written or typewritten, upon letter paper, of good quality, of the quarto size, with a margin of not less than one inch at the top, at the bottom, and on each side; and the sheets must be securely stitched or riveted together. The title-page of each manuscript must bear an assumed name, with a statement of the writer's academic standing; and the writer must give in, with her manuscript, a sealed letter, containing her true name and superscribed with her assumed name.

The manuscript must be deposited with the Dean of Radcliffe College on or before the first day of May, 1905.

In 1890 the Sargent Prize was awarded to Helen Leah Reed, of the class of 1890.

In 1892 the Sargent Prize was awarded to Margaret Foster Herrick, a special student.

In 1901 the Sargent Prize was awarded to Norma Rose Waterbury, of the class of 1904.

#### THE GEORGE B. SOHIER PRIZE.

This prize was founded by the late Waldo Higginson of Boston, of the Class of 1833 in Harvard College, in memory of his brother-in-law George Brimmer Sohier of the Class of 1852. The endowment is for "one prize

of \$250 for the best thesis presented by a successful candidate for Honors in English or in Modern Literature. If no thesis is deemed worthy of a prize, no prize will be given." "The competitors may be either:—(1) undergraduates in Harvard College, (2) Harvard graduates who are resident at the University as students in the Graduate School, or (3) students in Radcliffe College."

In 1897 the Sohier Prize was awarded to Beulah Marie Dix, of the class of 1897. Subject: "Published Collections of English and Scottish Ballads, 1765-1802."

In 1904 the Sohier Prize was awarded to Frances Elizabeth Newell, of the class of 1904. Subject: "Geoffrey of Monmouth and the Sabrina Legend."

## THE CAROLINE I. WILBY PRIZE.

This prize was founded in 1897 in memory of Miss Caroline I. Wilby, by her friends and former pupils.

The fund, originally \$3,060, has been somewhat increased, and the income is to be given annually to a Radcliffe student as a prize "for the best original work in any department."

The Wilby Prize was given for the first time in 1899 to Kate O. Petersen, Vassar, A. B. 1890, Radcliffe, A. M. 1895, Radcliffe graduate student, 1895–97, for a thesis on the Sources of Chaucer's Nonne Prestes Tale, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1900 to Lucy Allen Paton, A. B., 1892, A. M. 1894, Ph. D. 1902, for a thesis on Morgain la Fée, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1904 to Belva Mary Herron (*University of Michigan*) B. L., 1899, Radcliffe graduate student 1903–04, for a paper on the Progress of Labor Organization Among Women, and to Caroline Strong, A. B., 1903, Radcliffe graduate student, 1903–04, for a thesis on the Tail-Rhyme Strophe in English Poetry.

The prize may be withheld if no thesis or original work is deemed worthy of it.

#### JUNE EXAMINATIONS.

The examinations in June will *probably* be held at the following places:—Cambridge, at 10 Garden Street.

Quincy, in the rooms of the Quincy High School.

Andover, in the rooms of Phillips Academy.

Milton, in the rooms of Milton Academy,

Worcester, in the rooms of the English High School.

Lynn, in the rooms of the Classical High School.

Springfield, in the rooms of the Springfield High School.

Fall River, in the rooms of B. M. C. Durfee High School.

South Byfield, in the rooms of Dummer Academy.

Exeter, N. H., in the rooms of Phillips Exeter Academy.

Concord, N. H., in the rooms of St. Paul's School.

Portland, Me., in the rooms of the Portland High School.

Newport, R. I., in the rooms of St. George's School.

Washington, Conn., in the rooms of the Gunnery School.

New York, N. Y., in the lecture room of the Harvard Club.

Albany, N. Y., in the rooms of the Albany High School.

Buffalo, N. Y., in the rooms of the Buffalo Central High School, corner of Court and Franklin Streets.

Philadelphia, Pa., in the rooms of the Young Men's Christian Association, Fifteenth and Chestnut Streets.

Scranton, Pa., in the rooms of the School of the Lackawanna.

Pittsburgh, Pa., in the rooms of Shadyside Academy.

Washington, D. C., in the rooms of the Central High School.

Louisville, Ky., in the rooms of the Boys' High School, First Street.

Indianapolis, Ind., in the rooms of the Shortridge High School.

Milwaukee, Wis., in the rooms of the East Division High School.

Cleveland, O., in the rooms of the Central High School.

Cincinnati, O., in the rooms of the Young Men's Christian Association.

Youngstown, O., in the rooms of Rayen School.

Chicago, Ill., in the rooms of the John Marshall High School, Adams Street.

Detroit, Mich., in the rooms of Detroit University School.

St. Paul, Minn., in the rooms of St. Paul Academy, Corner Portland Avenue and Dale Street.

Kansas City, Mo., in the rooms of the Central High School.

St. Louis, Mo., in the rooms of the Board of Education, 9th and Locust Streets.

Omaha, Neb., in the rooms of the Omaha Public Library.

Denver, Col., in the rooms of the Denver High School (East Side), corner of Nineteenth and Stout Streets.

San Francisco, Cal., in the rooms of the Mechanics' Institute, 31 Post Street.

Portland, Oregon, in the lecture-room of the Portland Library.

Seattle, Wash., in the rooms of the Central School Number 15.

Bonn, Germany, at the Hotel Kley.

Honolulu, Hawaii, in the rooms of Oahu College.

#### COLLEGE ENTRANCE EXAMINATION BOARD.

In June, 1905, certain papers of the College Entrance Examination Board may be substituted for certain papers set for the separate admission examinations held by Harvard University. For more particular information apply to the Secretary of Radcliffe College.

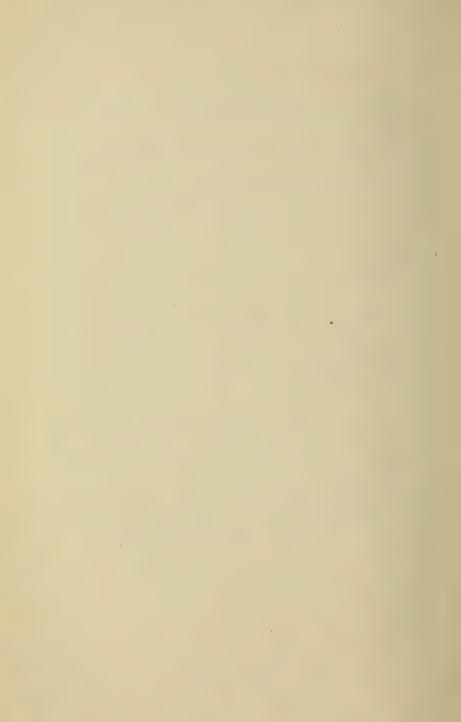
The examinations of the Board will be held June 19-24, 1905. Applications to attend the Board's examinations must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, N. Y., and must be made upon a blank form to be obtained from the Secretary of the Board upon application.

Applications for examination at points in the United States east of the Mississippi River (also at Minneapolis, St. Louis, and other points on the Mississippi River) must be received by the Secretary of the Board on or before Monday, June 5, 1905; applications for examination elsewhere in the United States or in Canada must be received on or before Monday, May 29, 1905; and applications for examination at points outside the United States and Canada must be received on or before Monday, May 15, 1905.

Applications received later than the dates named will be accepted when it is possible to arrange for the examinations of the candidates concerned, but only upon the payment of \$5.00 in addition to the usual examination fee.

The examination fee is \$5.00 for all candidates examined at points in the United States and Canada, and \$15.00 for all candidates examined at points outside of the United States and Canada. The fee (which cannot be accepted in advance of the application) should be remitted by postal order, express order, or draft on New York, to the order of the College Entrance Examination Board.

A list of the places at which examinations are to be held by the Board in 1905 will be published about March 1. Requests that the examinations be held at particular points, to receive proper consideration, should be transmitted to the Secretary of the Board not later than February 1.



#### RADCLIFFE COLLEGE.

#### ORDER OF EXAMINATIONS. (June and September.)

Monday, June 26, and September 18.

8-9 а. м.	All candidates	meet	at	10	Garden	Street	the	officer	${\rm in}$	charge
	of the examinat	ions.								

9-10. Elementary Physics. 2-3½. Plane Geometry. 104-12. Elementary French. 2-4. Geometry.

 $12\frac{1}{4}$  Solid Geometry.  $4\frac{1}{5}$ -6. Elementary German.

#### Tuesday, June 27, and September 19.

8–9. Physiography.  $1\frac{1}{2}-3\frac{1}{3}$ . Elementary English (a)  $9\frac{1}{4}-10\frac{1}{4}$ . Chemistry. 4-6. Advanced Latin.

103-123. Elementary Latin.

#### Wednesday, June 28, and September 20.

8-9 $\frac{1}{2}$ . Elementary Algebra. 11-12 $\frac{1}{2}$ . Elementary History. 9 $\frac{3}{4}$ -10 $\frac{3}{4}$ . Logarithms and Trigonometry. 1 $\frac{1}{2}$ -3 $\frac{1}{2}$ . Advanced French.

4-6. Advanced Greek.

#### Thursday, June 29, and September 21.

8–9. Meteorology.  $11\frac{1}{2}$ – $12\frac{1}{2}$ . Advanced Algebra.

 $9\frac{1}{4}-11\frac{1}{4}$ . Elementary Greek.  $1\frac{3}{4}-3\frac{3}{4}$ . Advanced German.  $9\frac{1}{4}-10\frac{3}{4}$ . Harmony. 4-6. Advanced History.

#### Friday, June 30, and September 22.

 $10\frac{1}{4}$  -  $12\frac{1}{4}$ . Counterpoint. 3-6. English (b).

11-21. Advanced Physics.

#### Saturday, July 1, and September 23.

94-104. Astronomy.  $11\frac{3}{4}-12\frac{3}{4}$ . Anatomy, Physiology and Hygiene.

#### SEPTEMBER EXAMINATIONS.

The September Examinations will be held in Cambridge only, on Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, September 18, 19, 20, 21, 22, and 23.

#### EXAMINATIONS IN GERMAN A, AND FRENCH A.

The examinations in German A and French A correspond to the admission examinations in Elementary German and French, and will be held on Monday, June 26, and Monday, September 18.

Monographs prepared by the students are published and sold by Messrs. Ginn & Company.

Besides the present publication, Radcliffe College issues annually a list of its Courses of Study and an Annual Report. These documents, and also separate pamphlets, published by Harvard University, giving detailed accounts of the work of the principal departments, may be had by addressing

Radcliffe College,

Cambridge, Massachusetts.



POSTOFFICES:
CHAMPAIGN
AND URBANAL

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# Radcliffe College

CAMBRIDGE, MASSACHUSETTS

1906

\*\*\* The legal title of the Corporation (to be used in making gifts and bequests) is "RADCLIFFE COLLEGE." It should be described as established in Cambridge, Massachusetts.

Correspondence should be addressed to Radcliffe College, Cambridge, Massachusetts.

The College buildings are open to visitors interested in the work of the College, both in vacations and in term-time; though students only are admitted to the class-rooms during the hours of lectures.

The Reference Library is in the Gilman Building.

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The Laboratories of Chemistry, Physics, and Botany are in buildings on the grounds.

The Laboratory of Biology occupies quarters in the University Museum in Oxford Street.

The Gymnasium is open to all students without charge.

The Dean and the Secretary may be consulted at Fay House during termtime, and special appointments may be made as required.

The President may be found at Fay House every Monday afternoon at half past two during term-time.

The Academic year begins on the Thursday following the last Wednesday in September. In 1906 it is September 27. Students report for registration at 9 A. M. of that day.

The summer vacation begins on the last Tuesday in June, and ends on the last Wednesday in September.

The Christmas recess is from December 23, 1906, to Jan. 2, 1907, inclusive.

The Spring recess is from April 14 to April 20, 1907, inclusive.

UNIVERSITY OF ILLINOIS,
PRESIDENT'S OFFICE,
POSTOFFICES:
GHAMPAIGN
AND URBANA.

## Radeliffe College.

RADCLIFFE COLLEGE, the successor of the Society for the Collegiate Instruction of Women, offers systematic collegiate instruction to women under the professors and other teachers of Harvard University. More than a hundred instructors of the University are teachers in Radcliffe College.

Fay House, 10 Garden Street, contains the offices and some of the recitation rooms. The other recitation-rooms, the library, and the gymnasium are near Fay House. The College has four laboratories, of Physics, Chemistry, Botany, and Biology. The collections of the Museum of Comparative Zoölogy, the Peabody Museum of American Archaeology, the University Museums of Geology, Botany, and Mineralogy, the Semitic Museum, and the Germanic Museum are also open to the students; and, by vote of the President and Fellows of Harvard College, the students have the use of the University Library, containing 500,000 volumes. Opportunities for study in the Astronomical Observatory, the Botanic Garden, and the Herbarium are also afforded.

The requirements for admission are identical with those for admission to Harvard College. The courses of instruction given in Radcliffe College correspond to both "Undergraduate" and "Graduate" courses offered by Harvard University, and are more than sufficient to enable a woman to perform the work required by the University for the degrees of A. B. and A. M. In addition to these, Graduate Students in Radcliffe College have access to a large number of Graduate courses in Harvard University. The examinations are the same in both institutions, and the diplomas conferring the degrees of A. B. and A. M. are countersigned by the President of Harvard University as a guarantee that these degrees are equivalent to the corresponding degrees given by the University.

For provisions for the admission of Special Students and Graduate Students, see pages 35, 36, 37, 38, 39, and 40.



## Associates of Radeliffe College.

ELIZABETH CARY AGASSIZ.

EZRA HENRY BAKER, A. B.

MARY LOWELL BARTON.

ELIZABETH BRIGGS, A. M.

LE BARON RUSSELL BRIGGS, A. M., LL. D.

WILLIAM ELWOOD BYERLY, PH. D.

ELLA LYMAN CABOT.

FREDERICK PICKERING CABOT, A. M., LL. B.

MARY COES, A. M.

MARY HUNTINGTON COOKE.

LILIAN HORSFORD FARLOW.

FREDERICK PERRY FISH, A. B.

ARTHUR GILMAN, A. M.

STELLA SCOTT GILMAN.

GEORGE LINCOLN GOODALE, M. D., LL. D.

WILLIAM WATSON GOODWIN, PH. D., LL. D., D. C. L.

JOHN CHIPMAN GRAY, LL. D.

ESTHER FISHER HALLOWELL, A. B.

CAROLINE LOUISE HUMPHREY, A. B.

AGNES IRWIN, LITT. D., LL. D.

VIRGINIA NEWHALL JOHNSON, A. B.

ALICE MARY LONGFELLOW.

ELLEN FRANCIS MASON.

FANNY PEABODY MASON.

JOHN FARWELL MOORS, A. M.

CHARLES ELIOT NORTON, LITT. D., LL. D.

FRANCES PARKMAN.

JOHN FORBES PERKINS, A. B., LL. B.

JAMES HARDY ROPES, A. B., D. D.

CLEMENT LAWRENCE SMITH, A. M., LL. D.

EZRA RIPLEY THAYER, A. M., LL. B.

JOSEPH BANGS WARNER, A. M., LL. B.

SARAH YERXA, A. B.

Honornry President
ELIZABETH CARY AGASSIZ

President

LEBARON RUSSELL BRIGGS

Dean

AGNES IRWIN

Treasurer

EZRA HENRY BAKER

Conneil

LeBaron Russell Briggs, Chairman

AGNES IRWIN

EZRA HENRY BAKER

WILLIAM ELWOOD BYERLY

FREDERICK PICKERING CABOT

MARY COES EZRA RIPLEY THAYER JOHN FARWELL MOORS FRANCES PARKMAN

WILLIAM WATSON GOODWIN

ELLA LYMAN CABOT

Academic Board

WILLIAM ELWOOD BYERLY Chairman

LEBARON RUSSELL BRIGGS

AGNES IRWIN

EDWARD LAURENS MARK SILAS MARCUS MACVANE HORATIO STEVENS WHITE EDWIN HERBERT HALL Ex officio

HERBERT WEIR SMYTH ALBERT ANDREW HOWARD GEORGE LYMAN KITTREDGE CHARLES HALL GRANDGENT

Secretary

MARY COES

Nibrarian

CAROLINE FARLEY

Mistress of Bertram Ball

ELIZA MASON HOPPIN

Director of the Gymnasium Elizabeth Agnes Wright

### Standing Committees.

The House Committee in charge of buildings, house-service, grounds, and repairs and additions, Miss Irwin, Chairman, Mr. Briggs (ex officio), Mr. Warner, Mr. Baker.

The Students' Committee in charge of the general discipline of the students, oversight of their homes while in Cambridge and of their amusements, clubs, and social life, Miss Irwin, Chairman, Mrs. Cooke, Miss Longfellow, Miss Coes, Mrs. Cabot, Mrs. Parkman.

The Library Committee with general supervision of the Library, Mr. Goodwin, Chairman, Mr. Briggs (ex-officio), Mrs. Farlow, Miss Irwin, Miss E. F. Mason.

The Finance Committee in charge of all matters pertaining to Expenditure, Endowment Fund, etc., Mr. Moors, Chairman, Mr. Baker, Mr. Fish, Mr. Gilman, Mr. Higginson.

The Committee on the Gymnasium, Mrs. Farlow, Miss Irwin, Miss Longfellow.

The Committee on Bertram Hall, Miss Irwin, Chairman, Mr. Moors, Mrs. Cooke, Miss Hopkinson, Miss Yerxa.

For the information of school officers and others, the College keeps a list of those students who have received degrees or certificates and wish to find positions as teachers.



## REQUIREMENTS FOR ADMISSION TO RADCLIFFE COLLEGE.

## ADMISSION OF CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS.

The requirements for admission to Radcliffe College are the same as those for admission to Harvard College. Radcliffe College holds no independent entrance examinations, but is authorized to make arrangements by which women may take the Harvard Examinations and have their work submitted to the Harvard Examiners. These examinations may be taken in Cambridge, and in other places in which the Harvard examinations are held in June. The September examinations are held in Cambridge only.\*

Two examinations of candidates for admission will be held in Cambridge in 1906, in Fay House. The days and hours are given in detail on page fifty-four of this pamphlet.

The academic year begins on Thursday, September 27, 1906. All Students register at the Office on that day at nine  $\Lambda$ . M.

Any one expecting to take admission examinations should register for such examinations on a form which may be obtained from the Secretary. When writing for this form she should say whether she is a Preliminary or a Final Candidate. The Registration Blanks of all candidates who wish to take examinations in June should be properly filled and in the hands of the Secretary by June 10; those of candidates who wish to take examinations in September, by September 10.

Every candidate for admission to Radeliffe College is required to furnish a certificate of honorable dismissal from the school or college which she has attended, or from the tutor with whom she has studied. She must

A fee of five dollars is to be paid by each candidate as often as she applies for examination. For this a receipt will be given, and the amount will be deducted from the first payment for tuition. The fee will not be returned to a candidate who does not enter college.

<sup>\*</sup> For the examinations of the College Entrance Examination Board see page 52.

also refer to two persons from whom information about her may be obtained. References should be sent to the Secretary of the college a month before the examination.

#### TERMS OF ADMISSION TO RADCLIFFE COLLEGE.

The studies which may be presented in satisfaction of the requirements for admission to the Freshman Class in Radcliffe College are named together in the following lists. The figure attached to each study indicates the relative weight which will be given to that study in determining the question of the candidate's fitness for admission:

Elementary		Advanced				
	English (a) or (b) (4) Greek (4) Latin (4) German (2) French (2)	Greek (2) Latin (2) German (2) French (2)				
History (2)	One of the following two: Greek and Roman English and American See p	History (2) One of the following four: Ancient English and American of Europe of a period sages 21, 22				
	Harmony (2)	Counterpoint (2)				
	Algebra (2) Geometry (3) or Plane Geometry (2)	Algebra (1) Logarithms and Trigonometry (1) Solid Geometry (1) Astronomy (1)				
	Physics (2) Chemistry (2) Physiography (1) Anatomy, etc. (1)	Physics (2) Meteorology (1)				

A candidate for admission must offer from this list studies amounting to 26 points, of which points at least four must be in advanced studies. The studies offered must include:—

English		4
One ancient language (Elem. Latin or I	Elem.	
Greek)		4
One modern foreign language (Elem. Ge	rman	
or Elem. French)		2
Elementary History		2
Algebra		2
Geometry or Plane Geometry		3 or 2
Studies amounting to two points from	the fol	-
lowing sciences (Elem. Physics, Che	mistry	,
Physiography, Anatomy, Physiology	y, and	i
Hygiene		2
		19 or 18

No candidate may offer an Advanced study who does not at the same time or earlier offer the corresponding Elementary study; but Physics is considered Elementary with respect to Meteorology, and Geometry or Plane Geometry, with respect to Astronomy.

Candidates who are looking forward to the extended study of English or of any other modern literature are advised to acquire a knowledge of Greek as well as of Latin.

For terms of admission to advanced standing, see page 35.

#### DEFINITIONS OF REQUIREMENTS.

GOOD ENGLISH.

Clear and idiomatic English is expected in all examination papers and note-books written by candidates for admission. Teachers are requested to insist on good English, not only in translations, but in every exercise in which the pupil has occasion to write or to speak English.

#### 1. English.

A candidate for admission to Radeliffe College may take either of the examinations, (a) and (b), described below. If she passes (b) she is exempt from the prescribed English of the Freshman year (English A); but if she passes it with Grade D she is required to take before the end of her second

year a half-course in English Composition in addition to her regular elective courses. Furthermore, on the evidence of her examination book she may be credited with an ungraded mark of "pass," but required to take the prescribed English of the Freshman year.

#### (a) Elementary English.

The examination will be based on the Uniform Entrance Requirements in English.

The candidate will be required to write short compositions on topics drawn from his reading, and to answer questions on the subject-matter of certain books prescribed for careful study. She will be judged chiefly by the accuracy and the quality of the English she writes. No candidate will be accepted in English whose work is seriously defective in point of spelling, punctuation, grammar, or division into paragraphs.

The Uniform Entrance Requirements in English include two lists of books — one of books prescribed for reading, and one of books prescribed for careful study. The candidate is expected to read intelligently all the books prescribed. She should read them as he reads other books; she is expected, not to know them minutely, but to have freshly in mind their most important parts. In connection with the reading and study of the prescribed books she should read other books as parallel or subsidiary reading, and should commit to memory a considerable amount of English poetry.

In 1906, 1907, and 1908 the books prescribed for reading are:—

Shakspere's Macbeth and The Merchant of Venice; The Sir Roger de Coverley Papers in the Spectator; Irving's Life of Goldsmith; Coleridge's The Ancient Mariner; Scott's Ivanhoe and The Lady of the Lake; Tennyson's Gareth and Lynette, Lancelot and Elaine, and the Passing of Arthur; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

The books prescribed for careful study in 1906, 1907, and 1908, are:—Shakspere's Julius Caesar; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America; Macaulay's Essay on Addison, and Life of Johnson.

In 1909 the examination in Elementary English will be based on the requirements in English adopted by the College Entrance Examination Board. These requirements are as follows:—

(a) Reading and Practice.— A certain number of books will be recommended for reading, ten of which, selected as prescribed below, are to be offered for examination. The form of examination will usually be the writing of a paragraph or two on each of several topics, to be chosen by the candidate from a considerable number — perhaps ten or fifteen — set before her in the examination paper. The treatment of these topics is designed to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. In every case knowledge of the book will be regarded as less important than the ability to write good English. In place of a part or the whole of this test, the candidate may present an exercise book, properly certified to by her instructor, containing compositions or other written work done in connection with the reading of the books. In preparation for this part of the requirement, it is important that the candidate shall have been instructed in the fundamental principles of rhetoric.

The books set for this part of the examination will be: —

Group I (two to be selected).

Shakspere's As You Like It, Henry V, Julius Caesar, The Merchant of Venice, Twelfth Night.

Group II (one to be selected).

Bacon's Essays; Bunyan's The Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers in the Spectator; Franklin's Autobiography. Group III (one to be selected).

Chaucer's Prologue; Spenser's Faerie Queene (selections); Pope's The Rape of the Lock; Goldsmith's The Deserted Village; Palgrave's Golden Treasury (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, and Burns.

Group IV (two to be selected).

Goldsmith's The Vicar of Wakefield; Scott's Ivanhoe; Scott's Quentin Durward; Hawthorne's The House of the Seven Gables; Thackeray's Henry Esmond; Mrs. Gaskell's Cranford; Dickens's A Tale of Two Cities; George Eliot's Silas Marner; Blackmore's Lorna Doone.

Group V (two to be selected).

Irving's Sketch Book; Lamb's Essays of Elia; De Quincey's Joan of Arc and The English Mail Coach; Carlyle's Heroes and Hero Worship; Emerson's Essays (selected); Ruskin's Sesame and Lilies.

Group VI (two to be selected).

Coleridge's The Ancient Mariner; Scott's The Lady of the Lake; Byron's Mazeppa and the Prisoner of Chillon; Palgrave's Golden Treasury (First

Series), Book IV, with especial attention to Wordsworth, Keats, and Shelley; Macaulay's Lays of Ancient Rome; Poe's Poems; Lowell's The Vision of Sir Launfal; Arnold's Sohrab and Rustum; Longfellow's The Courtship of Miles Standish; Tennyson's Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur; Browning's Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Evelyn Hope, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, The Boy and the Angel, One Word More, Hervé Riel, Pheidippides.

(b) Study and Practice.— This part of the examination presupposes the thorough study of each of the works named below. The examination will be upon subject-matter, form, and structure. In addition, the candidate may be required to answer questions involving the essentials of English grammar, and questions on the leading facts in those periods of English literary history to which the prescribed works belong.

The books set for this part of the examination will be: -

Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America, or Washington's Farewell Address and Webster's First Bunker Hill Oration; Macaulay's Life of Johnson, or Carlyle's Essay on Burns.

#### (b) English.

The examination will consist of questions in Rhetoric,\* questions in Literary History from the time of Shakspere, and compositions based on the following works:

Palgrave:
Golden Treasury (First Series)
Shakspere:
Julius Caesar

The Merchant of Venice

Macbeth

Twelfth Night or As You Like

It

King Lear or Hamlet

Milton:

L'Allegro

Il Penseroso

Comus

Bunyan:

The Pilgrim's Progress, or

Defoe:

Robinson Crusoe

Dryden:

Alexander's Feast

To the Memory of Mr. Oldham Upon the Death of the Earl of

Dundee

\* A. S. Hill's Principles of Rhetoric is used for the corresponding study in Radcliffe College, and is recommended for use in preparation for this examination. Swift:

The Voyage to Lilliput

Addison and Steele:

The Sir Roger de Coverley Papers

Pope:

Epistle to Arbuthnot

Goldsmith:

The Vicar of Wakefield The Deserted Village

Scott:

The Lady of the Lake

Ivanhoe

Quentin Durward

Macaulay:

Life of Johnson

Lays of Ancient Rome

Byron:

Mazeppa

The Prisoner of Chillon

Irving:

The Legend of Sleepy Hollow

Rip Van Winkle Tales of a Traveller

Thackeray:

Henry Esmond

Dickens:

A Tale of Two Cities, or

David Copperfield

Browning: Selections; for example,

Cavalier Tunes

The Lost Leader

How They Brought the Good News from Ghent to Aix

Evelyn Hope

Home Thoughts, from Abroad Home Thoughts, from the Sea

Incident of the French Camp

The Boy and the Angel

One Word More

Hervé Riel

Pheidippides

Tennyson: Selections; for example,

Enid

Elaine

The Passing of Arthur

The Lady of Shalott

The Lotus Eaters

Ulysses Tithonus

The Revenge

Franklin:

Autobiography

Hawthorne:

The House of the Seven Gables

Longfellow:

Tales of a Wayside Inn

Lowell:

The Vision of Sir Launfal

The candidate is expected to read all the books prescribed.\* She should read them as she reads other books,— not trying to remember them in detail, but regarding each work as a whole and giving it such appreciation as shall enable her to write about it intelligently. In every case the examiner will regard knowledge of the books as less important than ability to write English; if the examination book in English affords insufficient evidence, he will examine the written work of the candidate in other subjects.

<sup>\*</sup> In connection with the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry committed to memory.

No candidate will be accepted in English whose work is seriously faulty in spelling, grammar, punctuation, or division into paragraphs.

Preparation for the examination should occupy at least three school hours, or periods, a week for four years. Throughout the course frequent short compositions should be required as well as occasional long ones. Topics should be chosen by the pupil herself whenever that is possible; and the topics assigned by the instructor should be within the range of the pupil's knowledge and sympathies, and should be such as to awaken interest and stimulate intelligence. Criticism should be constant and thorough; it should take account of merits as well as of faults, and should never interfere with the honest expression of opinion or with the free play of individuality in thought and expression. Mechanical methods of every kind should be avoided; and attention should be fixed on principles rather than rules.

As to the right way of studying Rhetoric, attention is called to the following extract from the Report of the Vassar Conference:\*

"Though it is clear that the power to write a language can be obtained only by unremitting practice, yet, in the opinion of the Conference, such practice may properly be accompanied and illustrated by a course in elementary rhetoric. This course should include not only the principles of clearness, force, and good taste, but the principles of the arrangement of clauses in the sentence and of sentences in the paragraph. The teacher should bear in mind that any body of written English, of whatever length, is an organic unit, with principles that apply as well to the arrangement of the minor elements as to the grouping of the larger divisions of essay or book. Especial care should be taken that rhetoric is not studied by itself or for its own sake. Its connection with the pupil's actual written or spoken exercises should be kept constantly in view."

#### 2, 3. Greek.

#### 2. Elementary Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least *two* school years. The two parts of the examination cannot be taken separately:—

(a) The translation at sight of simple Attic prose. (The passages set for translation must be rendered into simple and idiomatic English.)

<sup>\*</sup> Report of the Committee of Ten, page 95, section 8

(b) A thorough examination on a prescribed portion of Xenophon (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Attic prose, involving the use of such words, constructions, and idioms only as occur in the portion of Xenophon prescribed.

The portion of Xenophon prescribed for this examination is the first book of the Anabasis, chapters i-viii. Two years' notice will be given of

any change in the selection.

#### 3. Advanced Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least three school years. The second part of the examination (Greek Composition) is optional, but candidates are advised to try this part of the paper, since a fair translation will offset deficiencies in the preceding part.

(a) The translation at sight of Attic prose and of Homer, with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. There will also be questions on the Homeric poems and Homeric life. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into Attic prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Greek prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the elementary and advanced examinations in Greek is based on the assumption that the candidate has begun the study of Latin at least a year earlier, and has continued it along with her Greek course; otherwise the periods specified would not be sufficient.

In preparation for the elementary examination in Greek, candidates should read from 130 to 170 pages \* of Attic prose. For the advanced examination candidates should read from 30 to 50 pages more of Attic prose, and from 3000 to 5000 verses of Homer. The reading of Homer may be advantageously begun with a thorough study of Iliad, Books I and II (to the catalogue of ships).

<sup>\*</sup> The pages of the more recent Teubner text editions are taken as a standard in this statement.

The pupil should be constantly guided in proper methods of reading, and trained to read the Greek intelligently, as Greek, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Greek, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Greek Composition, pupils should be trained, from an early stage of the preparatory course, to render into Greek, not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

#### 4, 5. Latin.

#### 4. Elementary Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *three* school years. The passages set for translation must be rendered into simple and idiomatic English. The three parts of the examination cannot be taken separately:—

- (a) The translation at sight of simple Latin prose.
- (b) An examination (which may include translation) on the first four books of Virgil's Aeneid, or on selected myths from Ovid's Metamorphoses, with questions on the subject-matter and on literary and historical allusions. Two years' notice will be given of any change in these alternative requirements.
- (c) An examination directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose.

#### 5. Advanced Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *four* school years. The passages set for translation must be rendered into simple and idiomatic English. The three parts of the examination cannot be taken separately:—

(a) The translation at sight of Latin prose and verse, with questions on ordinary forms, constructions, and idioms, and on prosody.

(b) An examination (which may include translation) on Cicero's four speeches against Catiline and the Defence of Archias; with questions on the subject-matter, the life of Cicero, and his position in literature.

(c) The translation into Latin prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the examinations in Latin is made with reference to schools which have a four years' course. Schools which have a five years' course may more advantageously provide for beginning the study of Latin in the first year, with some diminution, if necessary, of the time devoted to it in the last years of the course.

The course of reading pursued in preparation for the examinations in Latin should include: —

- (a) Easy reading, included in or following a suitable introductory book ('Latin Lessons'), amounting to from 30 to 40 pages; \*
  - (b) Nepos (Lives) and Caesar (Gallic War), 90 to 120 pages;
- (c) Cicero, 90 to 120 pages, including the four speeches against Catiline and the Defence of Archias, with additional speeches selected by the teacher;
- (d) Virgil and Ovid, 6000 to 10,000 verses, including the first six books of the Aeneid.

Preparation for the elementary examination alone should include (a) and (b), about 40 pages of Cicero, and either the first four books of Virgil's Aeneid, or the following myths from Ovid's Metamorphoses: Deucalion, Daphne, Phaethon, Cadmus, Pyramus, Andromeda, Proserpina, Niobe, Medea, Meleager, Philemon, Atalanta, Midas, Aleyone, Galatea.

The pupil should be constantly guided in proper methods of reading, and trained to read the Latin intelligently, as Latin, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Latin, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the advanced examination in Latin Composition, pupils should be trained, from an early stage of the preparatory course, to render into Latin not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

#### 6, 7. German.

#### 6. Elementary German.

- (a) The translation at sight of simple German prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of simple English sentences, or of easy connected prose, to test the candidate's familiarity with elementary grammar.

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than two hundred pages of easy German (including reading at sight in class).

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugation of the weak and the more usual strong verbs; the declension of articles, adjectives, pronouns, and such nouns as are readily classified; the commoner prepositions; the simpler uses of the modal auxiliaries; the elements of syntax, especially the rules governing the order of words.

Pronunciation should be carefully taught, and the pupils should have frequent opportunities to hear German spoken or read aloud. The writing of German from dictation is recommended as a useful exercise.

#### 7. Advanced German.

- (a) The translation at sight of ordinary German. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of those who have read, in addition to the amount specified under

Elementary German, not less than five hundred pages of classical and contemporary prose and verse. It is recommended that the reading be selected from such works as the following: Riehl, Culturgeschichtliche Novellen; Freytag, Bilder aus der deutschen Vergangenheit, Die Journalisten; Kohlrausch, Das Jahr 1813; Schiller, Der dreissigjährige Krieg, Wilhelm Tell, Maria Stuart, Die Jungfrau von Orleans; Goethe, Hermann und Dorothea, Egmont, Iphigenie; Lessing, Minna von Barnhelm. About one half of the amount read should be Nineteenth Century prose.

In the translation into German candidates will be expected to show a thorough knowledge of accidence, the elements of word-formation, the principal uses of prepositions and conjunctions and the essentials of syntax, especially the uses of the modal auxiliaries, and of the subjunctive and infinitive modes.

It is recommended that the candidate be trained to follow a recitation conducted in German and to answer in that language questions asked by the instructor.

#### 8, 9. French.

#### 8. Elementary French.

- (a) The translation at sight of ordinary Nineteenth Century prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of simple English sentences or of easy connected prose, to test the candidate's familiarity with elementary grammar. Proficiency in grammar may also be tested by direct questions, based on the passages set for translation under (a).

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than four hundred pages (including reading at sight in class) from the works of at least three different authors. It is desirable that a portion of the reading should be from works other than works of fiction.

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugations of regular verbs, of the more frequent irregular verbs, such as aller, envoyer, tenir, pouvoir, voir, vouloir, dire, savoir, faire, and those belonging to the classes represented by ouvrir, dormir connaître, conduire,

and *craindre*; the forms and positions of personal pronouns and of possessive, demonstrative, and interrogative adjectives; the inflection of nouns and adjectives for gender and number, except rare cases; the uses of articles, and the partitive constructions.

Pronunciation should be carefully taught, and pupils should have frequent opportunites to hear French spoken or read aloud. The writing of French from dictation is recommended as a useful exercise.

#### 9. Advanced French.

- (a) The translation at sight of standard French. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of candidates who have read, in addition to the amount specified under Elementary French, not less than six hundred pages of prose and verse from the writings of at least four standard authors. A considerable part of the amount read should be carefully translated into idiomatic English.

Candidates will be expected to show a thorough knowledge of accidence and familiarity with the essentials of French syntax, especially the uses of tenses, modes, prepositions, and conjunctions.

It is recommended that the candidate be trained to follow a recitation conducted in French and to answer in that language questions asked by the instructor.

#### 10, 11. History (including Historical Geography).

#### 10. Elementary History.

Either of the two following groups, each including two fields of historical study: —

- 1. Greek and Roman History.— (a) Greek History to the death of Alexander, with due reference to Greek life, literature, and art. (b) Roman History to the accession of Commodus, with due reference to literature and government.
- 2. English and American History.—(a) English History, with due reference to social and political development. (b) American History, with the elements of Civil Government.

For preparation in each of the two historical fields presented, a course of study equivalent to at least three lessons a week for one year will be necessary.

The candidate will be expected to show on examination such general knowledge of each field as may be acquired from the study of an accurate text-book of not less than 300 pages, supplemented by suitable parallel readings amounting to not less than 500 pages. The examination will call for comparison of historical characters, periods, and events, and in general for the exercise of judgment as well as of memory. Geographical knowledge will be tested by means of an outline map.

In the judgment of the Department of History it is desirable that Greek and Roman History be offered as a part of the preparation of every candidate.

#### 11. Advanced History.

Any one of the four courses of study which follow: —

- 1. Greek History to the destruction of Corinth and Roman History to the death of Constantine (open to those candidates only who have offered English and American History as an elementary study).
- 2. English History and American History (open to those candidates only who have offered Greek and Roman History as an elementary study).
- 3. European History from the Germanic conquests to the beginning of the Seventeenth Century.
- 4. A year's study of any one of the four historical fields defined under Elementary History and not already offered by the candidate, together with a year's detailed study of a limited period \* within that field, selected with the approval of the Department of History. [This requirement will be discontinued after the year 1906.]

In 1906, 1907, 1908 papers will be set in English and American History taken together and in English and in American History separately. After 1908 the paper in English and American History will be withdrawn. Candidates may obtain credit for Advanced History (2 points) by passing any one of these three examinations, if they take or have taken Elementary Greek and Roman History.

<sup>\*</sup> For example, the Spartan and Theban supremacies, the Period of the Punic wars, the Stuart Period, the transition from the American colonial to the federal system. The examination in the second part of 4 will be specially adapted to the particular period selected and will be held in Cambridge only.

In every case the candidate will be expected to show on examination such an acquaintance with the whole field as may be gained from the study of good text-books, together with substantial parallel readings, and, further, such a detailed knowledge of some part of the field as may be gained from suitable topical study. A higher standard of acquirement and of power to combine results will be expected than in the elementary requirement.

As further evidence of the candidate's proficiency satisfactory written work, done at school and certified by the teacher, must be submitted at the time of the examination. It must be presented in the form of a notebook (or bound collection of notes), containing not less than 50 written pages on each historical field offered, and must show practice in some of the following exercises:—

- (a) Notes and digests of the pupil's reading outside of the text-books.
- (b) Brief written tests requiring the application to new questions of knowledge previously acquired.
  - (c) Parallels between historical characters or periods.
- (d) Short studies of topics limited in scope, prepared outside of the classroom and illustrated by some reference to contemporary material.
- (e) Historical maps or charts showing explorations, migrations, conquests, territorial changes, or social conditions.

#### 12, 13. Music.

#### 12. Harmony.

The examination will be adapted to the proficiency of those who have studied Harmony in a systematic course of three lessons a week through one school year. Proficiency in pianoforte playing, and the ability to read chorals and moderately easy piano pieces at sight will be required. The work should consist partly of exercises written on figured basses in which all the triads and seventh-chords are to be employed progressively, and partly of the harmonization of simple melodies. Exercises must be written in a clear and well-formed notation. The course will embrace:

- 1. Notation; Clefs; Signatures; Diatonic and Chromatic Intervals and their inversions; Consonance and Dissonance; Major and Minor diatonic scales; Chromatic Scale; Natural Harmonic Series.
  - 2. Triads of the Major and Minor modes.
- 3. Rules of Chord-connection; Range of voices; Open and Close harmony; Tonality.

- 4. Inversions of Triads; Principles of doubling voices in chords, especially in successive Sixth-chords.
- 5. Chords of the Dominant Seventh, Dominant Ninth, and Diminished Seventh; Preparation and Resolution.
  - 6. Secondary Seventh-chords; Altered Chords; Augmented Chords.
  - 7. Suspensions.
  - 8. Passing and Changing notes; Pedal Point.
  - 9. Principles of key-relationship; Simple modulation. Shepherd's *Harmony* is recommended as a text-book.

#### 13. Counterpoint.

The examination will be adapted to the proficiency of those who have studied Counterpoint in a systematic course of three lessons a week through one school year, and presupposes training in pianoforte playing. As counterpoint applies the principles of harmony to the melodious treatment of the several voice-parts in combination, and as the art of musical composition begins properly with this study, the work should consist principally of written exercises on given themes, in the following order:—Chorals and melodies harmonized, with a free use of passing notes; the several orders of Counterpoint in two, three, and four voices, with and without cantus firmus; Double Counterpoint; Free Imitative Counterpoint; Analysis of the Two-part Inventions of Sebastian Bach; Simple forms of free composition, Organ Preludes, Two-part inventions, and Part Songs.

Students should use as models simple organ compositions and part-songs of modern composers. For the exercises in counterpoint the alto and tenor clefs should be used.

#### 14, 17. Mathematics.

A thorough practical acquaintance with ordinary Arithmetic is assumed as underlying all preparation in Mathematics. Knowledge of the fundamental principles of Arithmetic and careful training in accurate computation with whole numbers and with vulgar and decimal fractions form an essential part of early school work. But the pupil's time should not be wasted in the solution by arithmetic of puzzling problems which properly belong to algebra, or in complicated and useless reductions, or in the details of commercial arithmetic. It is desirable that some familiarity with algebraic expressions and symbols, including the methods of solving simple equations, be acquired in connection with the course in Arithmetic.

#### Elementary Mathematics.

14. Elementary Algebra.—Algebra, through Quadratic Equations. The requirement in Algebra includes the following subjects: factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem for positive integral powers of the binomial, and the extraction of roots; arithmetical and geometrical progressions; putting questions into equations and the reduction of equations; the ordinary methods of elimination and the solution of both numerical and literal equations of the first and second degrees with one or more unknown quantities and of problems leading to such equations.

The student should cover carefully the whole ground here specified, and should acquire a thorough understanding not only of the practice, but of the reasons involved in the elementary algebraic rules; for example, in the rules of multiplication, of signs, and of exponents, in the rules for fractions, and in those relating to the reduction and solution of equations. She should train herself to practical skill by the solution of a large number of examples, and should learn to do her work with reasonable quickness, as well as with confidence, accuracy, and clearness. The solution of fairly complicated literal quadratics, the various methods of elimination for equations of the first two degrees, the putting of problems in a neat manner into equations, and the working of the various algebraic operations both for integral and fractional expressions may be mentioned as important subjects of attention. The student should be taught to arrange her work in a clear, orderly, and compact fashion.

The time supposed to be devoted to the systematic study of the requirement in Algebra is the equivalent of a course of three lessons a week through two school years.

15. Geometry.— Plane and Solid Geometry, including problems in mensuration of plane and solid figures, and original propositions in Plane Geometry.

Geometric education should begin in the kindergarten or primary school, where the child should acquire familiarity through the senses with simple geometric forms, by inspecting, drawing, modelling, and measuring them, and noting their more obvious relations. This study should be followed, in the grammar school, by systematic instruction in Concrete (or Observa-

tional) Geometry, of which geometric drawing should form a part. Such instruction should include the main facts of Plane and Solid Geometry, treated as matters of observation, and not as exercises in logical deduction, without however necessarily excluding the beginnings of deductive proof as soon as the pupil is ready for them. Concrete Geometry is believed to have important educational value, and to prepare an excellent foundation for the later study of Formal Geometry. It belongs, however, to the earlier stages of school work, and should not be postponed until the time that belongs to direct preparation for college or the scientific school.

In teaching Formal Geometry, stress should be laid from the outset on accuracy of statement and elegance of form, as well as on clear and strict reasoning. As soon as the pupil has begun to acquire the art of rigorous demonstration, her work should cease to be merely receptive, she should be trained to devise constructions and demonstrations for herself, and this training should be carried through the whole of the work in Plane Geometry. Teachers are advised, in their selection of a text-book, to choose one having a clear tendency to call out the pupil's own powers of thought, prevent the formation of mechanical habits of study, and encourage the concentration of mind which it is a part of the discipline of mathematical study to foster. The subjects of Geometry, not a particular treatise, is what the pupil should be set to learn; and its simpler methods and conceptions should be made a part of her habitual and instinctive thought. Lastly, the pupil should be stimulated to good work by interest in the study felt and exhibited by the teacher.

The requirement in Geometry embraces the following topics: the general properties of plane rectilinear figures; the circle and the measure of angles; similar polygons; areas; regular polygons, and the measure of the circle; the relations of planes and lines in space; the properties and measure of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle. The propositions required under these several heads are those only which are contained in the older treatises, and which are recognized as constituting the Elements of Geometry. The examination does not include the additions introduced into some recent text-books, although most of those additions are in themselves valuable for the student who has time and taste for extra study in this field. A syllabus of the required propositions has been prepared. [This syllabus may be obtained, price 10 cents, at the Publication Office, 2 University Hall, Cambridge.]

The examination in Geometry also includes original propositions in

Plane Geometry, based on the propositions named in the syllabus, and problems in mensuration in both Plane and Solid Geometry; but excellence in bookwork and in exercises immediately illustrating bookwork will be allowed to offset in part any lack of skill in original work.

The time which it is recommended to assign to the systematic study of the requirement in Formal Geometry is the equivalent of a course of five lessons a week for one school year; but it is believed to be advisable to extend this allowance of time over two years.

#### 15a. Plane Geometry.

The requirement in Plane Geometry is stated on pages 1-14 of the Syllabus mentioned above.

#### Advanced Mathematics.

15b. Solid Geometry.— Chauvenet's Geometry, Revised and Abridged (Philadelphia: J. B. Lippincott & Co.), Books VI, VII, VIII, and IX, will serve to indicate the nature and amount of the requirement in Solid Geometry.

16. Logarithms and Trigonometry.— The theory of logarithms and the use of logarithmic tables.— Plane trigonometry.— The solution of the right spherical triangle.— Applications to simple problems.

No technical knowledge of the subjects of surveying and navigation, such, for instance, as the methods of parallel or middle latitude sailing, will be required, but such terms as latitude, longitude, angle of elevation or depression, bearing, etc., should be understood. At the examination, candidates are furnished with four-place tables belonging to the University, and are not allowed to use their own tables. The tables provided are distributed before the hour of examination, so that candidates may have at least an hour for becoming acquainted with their arrangement and use. Teachers who wish a still earlier opportunity of seeing these tables should write to the Secretary of Radcliffe College.

#### 17. Advanced Algebra.

The requirement in Advanced Algebra includes the following subjects:

(a) Simultaneous quadratics and equations solved like quadratics; properties of quadratic equations; addition, subtraction, multiplication and division of complex quantities; inequalities; variations; arithmetical

and geometrical progressions; mathematical induction; simple problems in choice and chance; continued fractions; scales of notation.

(b) Determinants, not including the multiplication theorem; simple applications of determinants to linear equations; the solution of numerical equations of higher degree, and so much of the theory of equations (not including multiple roots or Sturm's theorem) as is necessary for this purpose.

The topics included under (a) may be treated briefly. About half the time devoted to the requirements should be spent on the topics included under (b).

#### 18-24. Physical Science. \*

#### Elementary Physical Science.

18. Elementary Physics.—A course of study dealing with the leading elementary facts and principles of physics, with quantitative laboratory work by the pupil.

The instruction given in this course should include qualitative lectureroom experiments, and should direct especial attention to the illustrations
and applications of physical laws to be found in every-day life. The candidate is required to pass a written examination, the main object of which
will be to determine how much she has profited by such instruction. This
examination may include numerical problems. It will contain more questions than any one candidate is expected to answer, in order to make
allowance for a considerable diversity of instruction in different schools.

The pupil's laboratory work should give practice in the observation and explanation of physical phenomena, some familiarity with methods of measurement, and some training of the hand and the eye in the direction of precision and skill. It should also be regarded as a means of fixing in the mind of the pupil a considerable variety of facts and principles. The candidate is required to pass a laboratory examination, the main object of which will be to determine how much she has profited by such a laboratory course.

The candidate must name as the basis for her laboratory examination at least thirty-five exercises selected from a list of about sixty, described in a publication issued by Harvard University under the title, "Descriptive List

<sup>\*</sup>For rules relating to the time of handing in note-books and to candidates examined in June in places where no laboratory examination is provided, see p. 32.

of Elementary Exercises in Physics." [This list may be obtained, price 40 cents, at the Publication Office, 2 University Hall, Cambridge.] In this list the divisions are mechanics (including hydrostatics), light, heat, sound, and electricity (with magnetism). At least ten of the exercises selected must be in mechanics. Any one of the four other divisions may be omitted altogether, but each of the three remaining divisions must be represented by at least three exercises.

The candidate is required to present a note-book in which she has recorded the steps and the results of her laboratory exercises, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes. These exercises need not be the same as those upon which the candidate presents herself for the laboratory examination, but should be equivalent to them in amount and grade of quantitative work.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in physics. Experience has shown that pupils can make the original record of their observations entirely presentable, so that copying will be unnecessary, and they should in general be required to do so.

This course, if taken in the last year of the candidate's preparation, is expected to occupy in laboratory work, recitations, and lectures, five of the ordinary school periods, about fifty minutes in length, per week for the whole year. With few exceptions exercises like those in the Descriptive List already mentioned can be performed in a single school period, but for satisfactory results it will often be necessary to repeat an exercise. Two periods per week for the year should be sufficient for the laboratory work proper. If the course is begun much earlier than the last year of the candidate's preparation, as it well may be, it will require more time.

19. Chemistry.\*—A course of at least sixty experiments, performed at school by the pupil and accompanied with systematic instruction in principles and their applications, in accordance with directions given in a pamphlet entitled "An Outline of Requirements in Chemistry," issued by Harvard University for the use of teachers only.

<sup>\*</sup> The course will be mainly an experimental course in theoretical chemistry, but there will be experiments covering all branches of pure chemistry.

The candidate is required to pass both a written and a laboratory examination. The written examination will test her acquaintance with the facts and principles of Chemistry. The laboratory examination will test both her skill in performing experiments and her grasp of the principles involved in them. The candidate is further required to present the original note-book in which she recorded the steps and results of the experiments which she performed at school, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in Chemistry.

**20.** Anatomy, Physiology, and Hygiene.—A course of study and laboratory work equivalent to that described in a pamphlet entitled "An Outline of Requirements in Anatomy, Physiology, and Hygiene," issued by Harvard University.

The candidate will be required to pass both a written and a laboratory examination. The written examination will test the range and thoroughness of her knowledge of the elements of Anatomy, Physiology, and Hygiene. The laboratory examination will test (a) her ability to perform the experiments described in the Outline of Requirements, and (b) her knowledge of the first aids to be rendered to the injured.

At the time of the laboratory examination the candidate must present the original note-book containing (with dates) the notes and drawings she has made in the course of her laboratory work, and bearing the endorsement of her teacher, certifying that the book is a true record of the pupil's own observations and experiments. An index of subjects should be appended.

### Advanced Physical Science.

21. Advanced Physics.\* (This requirement will be discontinued after the year 1907.)

The University does not prescribe the experiments to be performed by

<sup>\*</sup> Equivalent to, but not necessarily identical with, Physics C.

those offering this subject for admission. The work should, however, be of advanced grade, almost wholly quantitative, and conducted with apparatus not necessarily elaborate, yet capable, if carefully handled, of yielding results of such accuracy as to warrant the consideration of somewhat minute error. For example, the balance used in weighing should be so delicate as to justify corrections for the buoyancy of the air on the weights and on the body weighed, and, in the determination of specific gravity, for the temperature of the water. The results should be discussed with reference to their precision and to the number of significant figures. There should be about sixty experiments well distributed through the range of general physics. If the student has devoted a considerable amount of time in the elementary course to experiments in heat, that division of physics may be here omitted. The laboratory work can be performed properly only in periods of considerable length, two to four hours, for example.

Instruction by lectures or text-books and work in problems should be a part of the course.

The candidate will be required to pass both a laboratory and a written examination. She should so thoroughly understand the work which she has performed as not to be confused in the laboratory examination by unfamiliar forms of apparatus.

The laboratory note-book will receive careful attention at the time of the examination. It must contain a certificate from the teacher that it is a true record of the candidate's work.

22. Physiography.— A course of study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Physiography," issued by Harvard University.

For the form of examination see note under Astronomy, below.

23. Meteorology.— A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Meteorology," issued by Harvard University.

This course requires a knowledge of Elementary Physics. (For the form of examination see under Astronomy, below.)

#### NEW ADMISSION EXAMINATION IN GEOGRAPHY.

After 1908 the examinations in Physiography and Meteorology will be withdrawn, and in place of them will be substituted an examination in Geography based upon the requirement in Geography of the College Entrance Examination Board. This requirement is based on the Report

of the Committee on Physical Geography of the Science Department of the National Educational Association.

Geography will be an elementary subject counting one point. The first examination in this subject will be set in June, 1906, at the hour announced for Physiography (Tuesday, June 26, at 8 A. M.).

**24**. Astronomy.— A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Astronomy," issued by Harvard University.

This course requires a knowledge of Geometry.

In Physiography, Meteorology, and Astronomy, the candidate will be required to take both a written and a laboratory or practical examination. The written examination may test her understanding of observational methods appropriate to the subject, but will call chiefly for a knowledge of facts and principles. The laboratory or practical examination will test her skill in observation as well as her grasp of principles. This examination can be taken in Cambridge only; for those who are examined elsewhere in June, it will be postponed to September.

The laboratory examination in Physiography may include the description, explanation, and comparison of geographical features shown in photographs, maps and models. The laboratory examination in Meterology may include the use of instruments, the discussion of observations, and the construction and interpretation of weather maps and climatic charts. The practical examination in Astronomy may call for an ability to make simple naked-eye and instrumental observations, and to establish the simpler generalizations of astronomy by discussion of these observations.

The candidate in these subjects will be required to present, at the time of the laboratory or practical examination the original note-book in which she recorded, with dates, the steps and results of the observations which she made at school. This book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. An index of subjects should be appended. The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of her work through an extended course of observational study, and that her work has been of a satisfactory character; but greater weight will be given to the practical or laboratory examination than to the note-book in determining the candidate's attainments.

#### LABORATORY EXAMINATIONS.

A candidate who is examined in any study in which a laboratory examination is held will hand in her laboratory note-book at the hour of the laboratory examination. Laboratory note-books will be deposited, after examination, in the Secretary's office, where they will be kept for a reasonable time, subject to the order of the owners.

A candidate examined in June at any place where a laboratory examination is not provided will be required to take such an examination in Cambridge in the autumn of the year in which she enters College; but if she passes the written examination in June, the subject will be temporarily counted in her favor in determining the question of her admission to College. Similarly, a Preliminary candidate is allowed to postpone her laboratory examination until September of the year in which she enters College.

#### EXAMINATION PAPERS.

A set of recent examination papers will be sent free to any address, on application to the Secretary.

#### DIVISION OF THE EXAMINATION.

Hereafter candidates who at any time before their preparation is complete wish to take examinations in subjects in which they are ready for examination may, with the approval of their school, offer themselves either in June or in September for examination in any subject or subjects in which they present a certificate of preparation. Consequently, the old rules, (1) that candidates may not divide their examinations except between two years, and (2) that candidates failing in June may not be reexamined in September in the same subjects, are abolished.

In each study numbered in bold-face type (1, 2, 3, etc.) there is one examination which cannot be divided.

#### PRELIMINARY EXAMINATION.

Hereafter, preliminary candidates who have received certificates of preparation from their schools will be credited with any subject or subjects in which they pass. The old rule, which fixed a minimum number of points for which credit was given at a preliminary examination, is abolished.

Candidates may offer themselves for the Preliminary Examination in any studies, Elementary or Advanced, in which their teachers certify that they are prepared, and in no others.

## OPTIONAL EXAMINATIONS AND ADMISSION TO ADVANCED STANDING.

#### ANTICIPATION OF COLLEGE STUDIES.

In addition to the examinations required for admission to Radeliffe College, optional examinations are provided for such candidates as have extended their studies beyond the requirements.

- I. A candidate may present herself for examination in any of the studies not offered by her for admission, and thus qualify herself to pursue more advanced courses in those subjects in College.
- II. A candidate may present herself for additional examination in one or more of the following studies: (a) any prescribed course or courses of the Freshman year (see below); (b) any elective course or courses intended primarily for undergraduates, provided the courses are of such a character that they may properly be anticipated by examination (see p. 34).

The examinations in prescribed Freshman English and in those elective studies which correspond to admission studies may be taken either in June or in September, or partly in June and partly in September.

The examinations in other elective studies are held in the autumn only. Written notice of intention to take these examinations must be in the hands of the Secretary not later than September 10.

For the times and places of examination, see pages 50, 51, and 54.

#### USES OF OPTIONAL EXAMINATIONS.

A student who has anticipated any of the studies of the Freshman year by means of the optional examinations may substitute in place thereof any elective courses which she is qualified to pursue.

Studies anticipated may be counted toward the degree of Bachelor of Arts in the manner herein provided; but the *grade of scholarship* attained in an anticipated study is not counted toward *distinction* with the degree:—

(1) If the studies anticipated amount to one half of the work of the Freshman year, the student may, upon application, be admitted to the Sophomore class, subject to the condition of making up the deficiency in her Freshman Studies.

- (2) In any case, the studies anticipated shall be placed to the student's credit, and may be used towards satisfying the requirements for the degree of Bachelor of Arts, in either of the following ways:—
- (a) The student may obtain leave from the Academic Board to fulfil the requirements for the degree in three years by taking additional elective studies.
- (b) The student may obtain leave from the Academic Board to reduce the number of courses required in the Senior year, or in the Senior and Junior years, by the amount of the studies anticipated.

Applications under (a) and (b) will not ordinarily be acted upon until the close of the student's first year; and the decision upon them will depend upon the quality of the student's record both in her examination for admission, and in her College work.

#### Examinations in Prescribed Freshman Studies.

Applicants for advanced standing (see below) and candidates anticipating Freshman studies are examined in the following studies, which correspond to the prescribed studies of the Freshman year.

- 1. ENGLISH.\* The examination in English A corresponds to the admission examination in English, (b) English (see page 12).
- 2. German or French (whichever the student did not offer at the examination for admission). The examinations in German A and French A correspond to the admission examinations in Elementary German and French (see pp. 18, 19).

#### Examinations in Elective Studies.

Examinations in elective studies that are not equivalent to admission studies are held only in the first fortnight of the academic year and only at Cambridge. Written notice of intention to take these examinations must be in the hands of the Secretary not later than September 10. The examinations in such elective studies as correspond to admission studies are identical with the examinations in the latter, and must be taken at the same times and places.

<sup>\*</sup> Elective courses in English are open, on the same terms as to Sophomores, to students who have anticipated the prescribed English of the Freshman year.

#### Admission to Advanced Standing.

Students may be admitted to advanced standing either (I.) by examination, or (II.) from other colleges without complete examination.

- I. BY EXAMINATION. A candidate may be admitted to the Sophomore, Junior, or Senior Class, if she appear on examination to be versed in the following studies:—
  - 1. The studies required for admission to the Freshman Class (pp. 8-31).
- 2. All the prescribed studies already pursued by the class for which she offers herself, and as many elective studies as she would have pursued if she had entered at the beginning of the course.

Examinations for advanced standing are held in such courses only as are intended primarily for undergraduates; and, among these, in such only as may reasonably be anticipated by examination. No laboratory course, no course in composition or discussion, and no other course in which an examination is obviously an inadequate test may be offered for admission to advanced standing.

A candidate may be admitted in spite of deficiencies in some of these studies; but no candidate so admitted is recommended for the degree until she has made good her deficiencies to the satisfaction of the Academic Board.

Candidates for admission to advanced standing may divide the examination between June and September.

For the times and the places of examinations, see pages 50, 51, 54.

The Secretary must receive, not later than September 10, a written notice specifying the elective course or courses in which the candidate wishes to be examined.

II. Without complete examination. Graduates of other colleges and students who have completed creditably the work of the first two years at other colleges may be admitted without examination, and assigned to those classes for which their previous training seems to qualify them. Every case is decided on its own merits. A student who has completed with credit the work of the Freshman year at another college may be admitted as a Special Student (see below) with the understanding that, after the results of her work for at least one year are known to the Committee, she shall be assigned to such regular standing as may seem proper.

Applications are acted upon at any season of the year. Every person wishing to enter Radcliffe College under this provision must make a complete written statement of the work on which she bases her application. In this she should state how old she is; at what school or schools she received her preparatory training; how long she attended each school; what she studied; how much time she gave to each of the more important studies; and how far she advanced in each before she entered college.

Blank forms of application for admission to advanced standing without

complete examination may be obtained from the Secretary.

Much importance is attached to the quality of the work offered. The applicant should furnish (1) official statements of her rank or grade in her various college studies; (2) letters, or other evidence, showing the opinion her instructors have formed of her character and scholarship, (3) a letter of honorable dismissal from the college whence she comes.

Candidates from other colleges may be admitted to Radcliffe College in spite of some deficiencies in their work, on condition that they shall make good these deficiencies before receiving the degree. Deficiency in one direction may be offset by unusual attainments in another.

#### SPECIAL STUDENTS.

Applicants who pass a satisfactory examination on a smaller number of subjects than are called for in the full Requirements may be admitted, at the discretion of the Academic Board, to such special courses as they seem qualified to pursue.

Students of mature age, who wish to pursue chiefly higher courses of study, may be admitted, at the discretion of the Academic Board, without passing the examination for admission, provided that they satisfy the instructors in the courses which they elect of their fitness to pursue them.

Every special student is expected to take four courses of study.

Special students may, on application, receive, at the end of their term of study, certificates stating the courses in which they have passed satisfactory examinations, and giving the grade to which they have been assigned in each course.

Special students should make application before the first day of September.

#### STUDENTS AND EXAMINATIONS.

Undergraduates are expected to make their choice of elective studies before the first day of September, and no changes are allowed after October 1, except by leave of the Academic Board. Applications for changes must be made to the Academic Board in writing, with a statement of reasons.

The student's choice is limited to those studies which her previous training qualifies her to pursue; and she must observe any restrictions that may be attached to the particular courses she wishes to select. She is further required to avoid any conflict of recitation hours or of examinations between her courses.

No starred (\*) course may be chosen without the *previous* consent of the Instructor. Application should be made, if possible, before the summer vacation.

An undergraduate who wishes to take a Graduate course is required to consult the Instructor in advance; if possible she should do this before the summer vacation. She will be admitted to the course on the recommendation of the Instructor, which must be given in writing.

Not more than one Course of Research may be taken in any year by an undergraduate.

All students are expected to attend all the exercises and to pass all the examinations in the courses which they elect, unless excused by special vote of the Academic Board. Applications for excuses must be made to the Secretary in writing with the reasons.

#### LODGINGS FOR STUDENTS.

Students may learn of lodging-places approved by the Students' Committee by enquiring of the Dean. The ladies of the Standing Committees will be glad to assist students by their advice.

Bertram Hall, the first hall of residence in Radeliffe College, was opened in 1901. It provides accommodations for twenty-five students and is under the charge of a resident mistress, Miss E. M. Hoppin. The hall is situated in Shepard Street, seven minutes walk from Radeliffe College. The price of board is \$6.00 a week for the 36 weeks from the last Wednesday in September to the day before Radeliffe Class Day, exclusive of the Christmas and the Spring recess, as fixed by the College catalogue. Students may

remain until the day after Radcliffe Commencement on payment of \$6.00 for the week's board. The charge for rooms is from \$100.00 up. These charges include all expenses of furnishing, service, heating and light, except open fires and washing. Applications for rooms in Bertram Hall must be sent before May 1st to Mr. John F. Moors, 111 Devonshire St., Boston.

All arrangements for boarding and lodging are to be subject to the approval of the Dean.

Any change of address must be at once reported to the Dean and to the Secretary.

#### GRADUATE STUDENTS.

#### Admission.

Bachelors of Arts of Radcliffe College, and Graduates of other Colleges of good standing who present satisfactory evidence of character and qualifications, are admitted without examination as Graduate Students in Radcliffe College.

An application for admission may be made by filling out a registration blank and depositing it at the office. If the applicant is not a graduate of Radcliffe College, she must also file, for the consideration of the Academic Board, satisfactory certificates of scholarship and character; and if she holds a degree from any institution, she must present diplomas or official certificates, sufficient to furnish evidence of her holding such degree or degrees.

Admission as a Graduate Student does not imply admission to candidacy for a Degree.

Graduate Students, not Bachelors of Arts of Radcliffe College, who wish to become candidates for any degree, should make early application, at the beginning of the Academic Year if possible, in order to learn the conditions under which they may be accepted as qualified for candidacy.

#### RESIDENCE.

Graduate Students are required to be in regular attendance on the exercises in some course or courses of instruction, and to do all the required work (including all examinations) in the courses which they elect; or to carry on regular work in some Laboratory or Museum or in the Library, under the frequent inspection and criticism of some specified instructor or instructors.

#### STUDIES.

The instruction open to students in Radcliffe College is arranged in one list of Courses of Instruction, consisting of Full Courses and Half-Courses. These are distributed into *three groups* in the several branches of study, namely.

- (1) Courses designed primarily for Undergraduates.
- (2) Courses for Graduates and Undergraduates.
- (3) Courses primarily for Graduates.

Any course (or half-course) in the list is open to all Graduate Students who present sufficient evidence of qualification for that course. It is sometimes advisable, and is not unusual, for a graduate student to choose some of her studies from the First, or Undergraduate, Group; but such studies are not ordinarily counted for the degree of A. M. Many of the studies of the Second Group are distinctly of Graduate grade, in the sense of being in advance of such as are ordinarily pursued for a Bachelor's degree. They are thorough and comprehensive courses, characterized by advanced methods of instruction and study; and are in fact largely chosen by Graduate Students, and found suitable to their needs. To some of these courses, undergraduates are admitted only by special leave of the instructor. To the courses of the Third Group, undergraduates are admitted only on the recommendation of the instructor.

Among the higher courses of instruction — of the Second and Third Groups — in nearly every department of study, are Courses of research and Seminaries, for students who wish to do special work of an advanced character. These courses are carried on under various plans of administration in the several departments, but always with the object of affording opportunity for regular independent study.

A complete year's work for a Graduate Student regularly consists of four full courses of instruction, of advanced grade, or of their equivalent in courses and half-courses, pursued with high credit throughout an academic year. All the work required in such courses must be done, and all the examinations must be passed; unless the student has leave from the Academic Board, with the approval of the Instructor, to omit some part of the ordinary requirement.

A student who wishes to devote her time, largely or wholly, to special study of an advanced character may count a course embracing such study as equivalent to more than one course, up to a complete year's work, or may carry on such study outside and in place of the regular courses, under

the direction and supervision of some specified instructor or instructors. In either case, the substitution proposed must have the approval or consent of the Instructor or Instructors concerned; and the permission of the Academic Board is required.

#### DEGREES.

The requirements for the degrees of Bachelor of Arts and Master of Arts are as follows:

In order to be recommended for the degree of Bachelor of Arts, a candidate must have passed in studies amounting to sixteen courses, together with such work in English as may be prescribed for her; making a total of seventeen or seventeen and a half courses, as the case may be. She must, moreover, have attained a grade above D in at least two-thirds of all the work done by her in Radcliffe College in satisfaction of the requirements for the degree, and in her Senior year must have passed in not less than four courses, with grades above D in at least two of them.

An undergraduate must take, in each academic year, at least four courses, in addition to such work in English as may be prescribed for her; and (including her prescribed English) she may take five, but not more, as regular courses to be counted towards the degree. Certain studies taken in the Harvard Summer School may also be counted towards the degree.

The ordinary requirement for the degree of Master of Arts for a graduate of a college of good standing consists of at least one year of residence and study devoted to advanced work approved by the Academic Board of Radcliffe College as affording suitable preparation for the degree and completed with high credit. Other persons will be admitted to the degree on conditions to be determined in each case.

The programme of study for the degree of Master of Arts must form a consistent plan of work pursued with some definite aim, though it need not lie wholly in one Department or field. This work may be done either in, or in connection with, the regular courses of instruction, or independently of them. In the latter case it must be carried on under the guidance of some specified instructor.

No student may count for the degree of Master of Arts courses which she has taken as an undergraduate.

All diplomas are countersigned by the President of Harvard University and bear the University seal.

#### TUITION FEES.

The annual tuition fee for a student doing full work is two hundred dollars, in addition to the special laboratory fees named below. It is payable, one hundred and twenty-five dollars on October 1, seventy-five dollars on February 1.

For those students who are permitted by the Academic Board to take less than four courses, two-thirds of the fee is payable on October 1, the remaining third on February 1. The charges are as follows:—

For any regular course, not a laboratory course of course of research, sixty dollars; for any half-course, not a laboratory course, thirty dollars; for a course of research or for a laboratory course, besides the special laboratory fees, a sum equal to the fee for one, two, or more courses, according to the number of courses to which the Academic Board shall consider it equivalent as part of the student's work for the year. But the minimum fee charged for any student is forty dollars, and the maximum fee, in addition to the special laboratory fees, is two hundred dollars, covering any number of courses that a student is permitted to take.

Students in laboratory courses pay in addition a special laboratory fee of five dollars for each course and of five dollars or two and a half dollars for each half-course.

No student will be admitted for any shorter time than a whole academic year, except by special vote of the Academic Board.

A student doing full work and therefore liable for the full tuition fee of two hundred dollars is entitled to a partial remission of fee in case of properly notified withdrawal from college or protracted absence, as follows: It she withdraws in the course of the academic year she is charged only to the end of the third in which she withdraws, provided that before that time she gives written notice of her withdrawal to the Dean; otherwise she is charged to the end of the third in which such written notice is given.

If she is absent with the consent of the Academic Board for three consecutive months she is entitled to a deduction of fifty dollars from the year's tuition fee; if she is absent for the whole year, not including the midyear and final examinations or either of them, she is entitled to a deduction of one hundred and fifty dollars provided she has given in either case previous notice of her intended absence to the Secretary.

In the case of students liable for less than the full fee of two hundred dollars no deduction is made for absence or withdrawal.

No student is entitled to a reduction of fee on account of withdrawal from a course or courses after the year has begun unless she withdraws from the college and then only if she has been doing full work.

No claim for deduction of fee will be considered if presented after the close of the Academic year in which the absence or withdrawal took place.

Elizabeth Cary Agassiz House, opened in 1905, contains, in addition to the theatre, a lunch room, living room, reading room, locker room and quiet rooms for the daily use of all the Radcliffe students. In 1905–06 a large part of the running expenses of Agassiz House were defrayed by voluntary contributions. The Council voted (on June 4, 1906) that each student registered in Radcliffe College in 1906–07 be required to pay \$5 for the use of Agassiz House. This amount will be charged on the first term bill.

No student is permitted to attend any college exercise after October 15th in any year unless all bills previously rendered for that year have been paid; and similarly no student is permitted to attend any College exercise after March 1st unless all bills previously rendered have been paid; and in no event is any degree conferred unless all dues to the College have been paid at least twenty-four hours before Commencement Day.

# THE CHARLES ELIOT NORTON FELLOWSHIP IN GREEK STUDIES.

In 1902, James Loeb, of the Class of 1888, gave securities valued at fourteen thousand one hundred dollars for the permanent establishment of this fellowship, which he had maintained during the year 1901–02, "in grateful recognition of the long and great friendship which Professor Norton has shown him since his boyhood, and in order to record in a fitting manner the eminent services which Professor Norton has rendered the cause of Archæology, and his beneficent prominence in the Archæological Institute of America and the American School of Classical Studies at Athens."

Competition for the fellowship is open to members of the Senior Class in Harvard College and of the Graduate School of Arts and Sciences of Harvard University, and to Seniors and Graduate Students in Radcliffe College. It has an annual income of six hundred dollars.

The award will be made by a committee appointed by the Department of the Classics, of which committee Professor Norton is to be a member during his life, on the basis (1) of a thesis on a subject approved by this committee, and (2) of such other evidence of scholarship as may be accessible. In the award, no account is to be taken of the financial means of the competitor; and no award will be made in case the theses offered are not of sufficient merit.

The editors of the Harvard Studies in Classical Philology are to have the right to publish the thesis of the successful candidate.

The incumbent of the fellowship must agree to pursue his studies for the year of his incumbency at the American School of Classical Studies at Athens, and to devote himself to the study of some special subject approved by the committee, in the field of Greek History, Literature, Art, Archæology, Epigraphy, or Topography. He shall also agree to write and publish, at the end of the year of his fellowship, a monograph embodying the results of his investigations.

In accordance with the terms of the fellowship, the award will be made in the Spring of 1907, for the academic year 1907-08. The following subjects for theses are proposed by the Committee:—

The Greek Epigram in Literature and Inscriptions to the End of the Classical Age.

The Dramatic Art of Euripides.

Virgil's Originality with especial reference to his Indebtedness to the Greek Poets.

The Evidence in Aristotle's Writings of a Belief in a Personal Immortality of the Soul.

The Relation of the Greek Ceramic Artists to the Great Masters of Painting.

The Greek Conception of Liberty and Democracy compared with the Modern. Candidates may, however, with the consent of the Committee, write on other classical subjects.

Applications for admission to candidacy must be made to the Chairman of the Department of the Classics not later than December 1, 1906; and the theses of approved candidates must be presented to the Chairman not later than March 1, 1907.

#### ELIZABETH ALLEN PATON MEMORIAL FELLOWSHIP.

A Fellowship of \$100, established for the year 1905-06, has been continued for the year 1906-07 by Lucy Allen Paton, (A. B. 1892, Ph. D. 1902) in memory of her mother, Elizabeth Allen Paton. The conditions are as follows: It is to be awarded to a graduate student who has

already begun some piece of advanced research in the departments of English or Modern Languages which she wishes to complete at Radcliffe, the fellowship to be awarded entirely without regard to her financial circumstances, and only as a recognition of her character and scholarship.

This Fellowship was awarded in 1905–06 to Muriel Bothwell Carr, (McGill University) A. B. 1898, A. M. 1900, (Radeliffe) A. M. 1902.

#### SCHOLARSHIPS.

Applications for scholarships should be addressed to the Dean of Radcliffe College, and should be in the hands of the Dean on or before the first of June, 1907.

#### THE EDWARD AUSTIN SCHOLARSHIPS.

In 1899, the sum of \$25,500 was received by Radcliffe College in settlement of the bequest of \$30,000, made by Edward Austin, the income thereof to be paid to "needy, meritorious students and teachers, to assist them in payment of their studies."

In 1900 the heirs of Edward Austin gave \$2,250 to be added to this fund. For the year 1905–06 five scholarships were awarded from the income of this fund.

One scholarship of \$200 to Nina Elizabeth Church (Dalhousie College) A. B. 1896, A. M. 1899, (Radcliffe College) A. M. 1903.

One scholarship of \$200 to Sarah Louise Hadley (Wellesley College) A. B. 1896, (Columbia University) A. M. 1903.

One scholarship of \$200 to Gertrude Schöpperle (Wellesley College) A. B. 1903, A. M. 1905.

One scholarship of \$200 to DOROTHY KENDALL, of the class of 1907. One scholarship of \$200 to Frances Hope Kerr, of the class of 1908.

#### THE HARVARD ANNEX SCHOLARSHIP.

By gift of the Alumnae and students of the "Harvard Annex" and their friends, an annual scholarship has been established to be known as "The Harvard Annex Scholarship founded by Alumnae of Radcliffe College." The fund provides for the tuition fees of one student.

In 1905-06 this scholarship was awarded to Florence Alden Gragg (Radcliffe College) A. B. 1899.

#### THE ELLEN M. BARR SCHOLARSHIPS.

By the terms of the will of the late Ellen M. Barr, the residue of her estate, after the payment of debts and legacies, was bequeathed to Radcliffe College. Subject to the payment of an annuity, the income of this bequest is to be applied "in the form of annual scholarships of not less than two hundred and fifty dollars and not more than three hundred dollars each, for the benefit of students in Radcliffe College, who, in point of character, ability and physical constitution, give promise of future usefulness, and who stand in need of pecuniary assistance."

In 1905–06 five scholarships from this fund, of the value of \$250 each were awarded to Anna Johnson (University of South Dakota) A. B. 1903, (State University of Iowa) M. S. 1904, (Radcliffe College) A. M. 1905; Grace Faulkner Ward (Smith College) A. B. 1900, (Radcliffe College) A. M. 1905; to Margaret Elden Rich and Jennie Ervine Woodward, of the class of 1907; and to Rosalind Denny Kenway, of the class of 1908.

#### THE ELLA LOWELL LYMAN MEMORIAL SCHOLARSHIP.

By gift of Mr. Arthur T. Lyman of Boston, an annual scholarship has been established in memory of his wife, Ella Lowell Lyman. The fund provides for the tuition fees of one student.

In 1905-06 this scholarship was awarded to Florence Ellen Lahee of the class of 1908.

#### THE ELIZABETH CARY AGASSIZ SCHOLARSHIP.

The Elizabeth Cary Agassiz Scholarship is a gift to Radcliffe College from various friends of Mrs. Agassiz, who wished that it should bear her name. The fund provides for the tuition fees of one student.

In 1905-06 this scholarship was awarded to Lois Kimball Mathews (Leland Stanford Jr., University) A. B. 1903, A. M. 1904.

#### THE AGNES IRWIN SCHOLARSHIP.

By gift of six hundred and eighty former pupils of the first Dean of Radcliffe College, the Agnes Irwin Scholarship has been established. By the terms of the gift the student to have the benefit of this scholarship is to be appointed by Miss Agnes Irwin, and all details regarding it are to be arranged by her for the present and the future. The fund provides for the tuition fees of one student.

In 1905-06 this scholarship was awarded to Cary Anne McAdams, of Kentucky.

#### THE WIDOW JOANNA HOAR SCHOLARSHIP.

The College has established the Widow Joanna Hoar Scholarship with funds contributed by an unknown friend in memory of the widow of Charles Hoar, Sheriff of Gloucester in England, who came to America with her children in 1638. In awarding this scholarship preference is to be given to natives of Concord, Mass., or to daughters of citizens of that place. The fund at present provides for the tuition fees of one student.

In 1905-06 this scholarship was awarded to Mabel Collin Osborne of the class of 1907.

#### THE MARIA DENNY FAY MEMORIAL SCHOLARSHIP.

An annual scholarship of two hundred dollars (\$200) has been established which provides for the tuition fees of one student.

In 1905-06 this scholarship was awarded to Constance Fuller of the class of 1906.

#### THE JOSIAH M. FISKE MEMORIAL SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske, of New York City, an annual scholarship has been established in memory of her late husband, Josiah M. Fiske, who was once a resident of Cambridge. The fund provides for the tuition fees of one student.

In 1905-06 this scholarship was awarded to Alcina Burrill Houghton of the class of 1907.

#### THE CANTABRIGIA SCHOLARSHIP.

The Cantabrigia Scholarship was founded in 1903 from a gift made by the Cantabrigia Club of Cambridge. The income provides for the tuition fees of one student, and will be awarded by preference to a resident of Cambridge.

In 1905-06 the income of this scholarship was divided between Clara Grace Jones and Eleanore Eunice Lothrop, both of the class of 1909.

#### THE ABBY W. MAY SCHOLARSHIP.

By the terms of the will of the late Sarah Wyman Whitman, of Boston, an annual scholarship of two hundred dollars (\$200) has been established in memory of Abby W. May. The fund provides for the tuition fees of one student.

In 1905-06 this scholarship was awarded to Molly Gilbert Brown of the class of 1908.

#### THE MARY ELIOT PARKMAN SCHOLARSHIP.

By the terms of the will of the late Sarah Wyman Whitman, of Boston, an annual scholarship of two hundred dollars (\$200) has been established in memory of Mary Eliot Parkman. This fund provides for the tuition fees of one student.

In 1905-06 this scholarship was awarded to Louise Louisbury of the class of 1908.

#### THE JAMES A. WOOLSON SCHOLARSHIP.

By the terms of the will of the late James A. Woolson, of Cambridge, an annual scholarship of two hundred dollars (\$200) has been established which provides for the tuition fees of one student.

In 1905-06 this scholarship was awarded to Emma Frost of the class of 1909.

#### PRIZES.

#### THE SARGENT PRIZE.

This prize was first offered in 1886–87 by John Osborne Sargent of New York, of the class of 1830, and was endowed in his memory, in 1892, by his daughter, Georgiana W. Sargent. The prize is of one hundred dollars, and is offered for the best metrical translation of a lyric poem of Horace, to be selected each year by the Department of the Classics.

The selection for 1907 is the thirty-seventh Ode of the first Book.

Undergraduates of Harvard College and of Radcliffe College may compete for this prize. The prize may be withheld if no competitor appears to deserve it.

The versions must be neatly and legibly written or typewritten, upon letter paper, of good quality, of the quarto size, with a margin of not less than one inch at the top, at the bottom, and on each side; and the sheets must be securely stitched or riveted together. The title-page of each manuscript must bear an assumed name, with a statement of the writer's academic standing; and the writer must give in, with her manuscript, a sealed letter, containing her true name and superscribed with her assumed name.

The manuscript must be deposited with the Dean of Radeliffe College on or before the first day of May, 1907.

In 1890 the Sargent Prize was awarded to Helen Leah Reed, of the class of 1890.

In 1892 the Sargent Prize was awarded to Margaret Foster Herrick, a special student.

In 1901 the Sargent Prize was awarded to Norma Rose Waterbury, of the class of 1904.

#### THE GEORGE B. SOHIER PRIZE.

This prize was founded by the late Waldo Higginson of Boston, of the Class of 1833 in Harvard College, in memory of his brother-in-law George Brimmer Sohier of the Class of 1852. The endowment is for "one prize

of \$250 for the best thesis presented by a successful candidate for Honors in English or in Modern Literature. If no thesis is deemed worthy of a prize, no prize will be given." "The competitors may be either:— (1) undergraduates in Harvard College, (2) Harvard graduates who are resident at the University as students in the Graduate School, or (3) students in Radcliffe College."

In 1897 the Sohier Prize was awarded to Beulah Marie Dix, of the class of 1897. Subject: "Published Collections of English and Scottish Ballads, 1765–1802."

In 1904 the Sohier Prize was awarded to Frances Elizabeth Newell, of the class of 1904. Subject: "Geoffrey of Monmouth and the Sabrina Legend."

#### THE CAROLINE I. WILBY PRIZE.

This prize was founded in 1897 in memory of Miss Caroline I. Wilby, by her friends and former pupils.

The fund, originally \$3,060, has been somewhat increased, and the income is to be given annually to a Radcliffe student as a prize "for the best original work in any department."

The Wilby Prize was given for the first time in 1899 to Kate O. Petersen, (Vassar) A. B. 1890 (Radcliffe) A. M. 1895, Radcliffe graduate student, 1895–97, for a thesis on the Sources of Chaucer's Nonne Prestes Tale, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1900 to Lucy Allen Paton, A. B., 1892, A. M. 1894, Ph. D. 1902, for a thesis on Morgain la Fée, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1904 to Belva Mary Herron (University of Michigan) B. L., 1899, Radcliffe graduate student 1903-04, for a paper on the Progress of Labor Organization Among Women, and to Caroline Strong, A. B., 1903, A. M. 1906, for a thesis on the Tail-Rhyme Strophe in English Poetry.

The Wilby Prize was given in 1905 to Eleanor Harris Rowland, A. B. 1903, A. M. 1904, Ph. D. 1905, for her Doctor's dissertation on the Aesthetics of the Repetition of Visual Space Forms.

The Wilby Prize was given in 1906 to Frances Hall Rousmaniere, (Wellesley) A. B. 1900, A. M. 1904, (Radcliffe) Ph. D. 1906, for a paper on Certainty and Attention.

The prize may be withheld if no thesis or original work is deemed worthy of it.

#### JUNE EXAMINATIONS.

The examinations in June will *probably* be held at the following places: — Cambridge, at 10 Garden Street.

Quincy, in the rooms of the Quincy High School.

Andover, in the rooms of Phillips Academy.

Milton, in the rooms of Milton Academy.

Worcester, in the rooms of the English High School.

Lynn, in the rooms of the Classical High School.

Springfield, in the rooms of the Springfield High School.

Fall River, in the rooms of B. M. C. Durfee High School.

South Byfield, in the rooms of Dummer Academy.

Exeter, N. H., in the rooms of Phillips Academy.

Concord, N. H., in the rooms of St. Paul's School.

Portland, Me., in the rooms of the Portland High School.

Newport, R. I., in the rooms of St. George's School.

Washington, Conn., in the rooms of the Gunnery School.

New York, N. Y., at a place to be announced later.

Albany, N. Y., in the rooms of the Albany High School.

Buffalo, N. Y., in the rooms of the Buffalo Central High School, corner of Court and Franklin Streets.

Philadelphia, Pa., in the rooms of the Young Men's Christian Association, Fifteenth and Chestnut Streets.

Scranton, Pa., in the rooms of the School of the Lackawanna.

Pittsburgh, Pa., in the rooms of Shadyside Academy.

Washington, D. C., in the rooms of the Central High School.

Louisville, Ky., in the rooms of the Boys' High School, First Street.

Indianapolis, Ind., in the rooms of the Shortridge High School.

Milwaukee, Wis., in the rooms of the East Division High School.

Cleveland, O., in the rooms of the Central High School.

Cincinnati, O., in the rooms of the Young Men's Christian Association.

Youngstown, O., in the rooms of Rayen School.

 ${\it Chicago,\,Ill.,\,in\,the\,rooms\,of\,the\,John\,Marshall\,High\,School,\,Adams\,Street.}$ 

Detroit, Mich., in the rooms of Detroit University School.

St. Paul, Minn., in the rooms of St. Paul Academy, Corner Portland Avenue and Dale Street.

Kansas City, Mo., in the rooms of the Central High School.

St. Louis, Mo., in the rooms of the Board of Education, 9th and Locust Streets.

Omaha, Neb., in the rooms of the Omaha Public Library.

Denver, Col., in the rooms of the Denver High School (East Side), corner of Nineteenth and Stout Streets.

San Francisco, Cal.

Portland, Oregon, in the lecture-room of the Portland Library. Seattle, Wash., in the rooms of the Central School Number 15.

Bonn, Germany, at the Hotel Royal.

Honolulu, Hawaii, in the rooms of Oahu College.

#### COLLEGE ENTRANCE EXAMINATION BOARD.

In June, 1907, certain papers of the College Entrance Examination Board may be substituted for certain papers set for the separate admission examinations held by Harvard University. For more particular information apply to the Secretary of Radcliffe College.

The examinations of the Board will be held June 17–22, 1907. Applications to attend the Board's examinations must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, N. Y., and must be made upon a blank form to be obtained

from the Secretary of the Board upon application.

Applications for examination at points in the United States east of the Mississippi River (also at Minneapolis, St. Louis, and other points on the Mississippi River) must be received by the Secretary of the Board on or before Monday, June 3, 1907; applications for examination elsewhere in the United States or in Canada must be received on or before Monday, May 27, 1907; and applications for examination at points outside the United States and Canada must be received on or before Monday, May 13, 1907. Applications received later than the dates named will be accepted when it is possible to arrange for the examinations of the candidates concerned, but only upon the payment of \$5.00 in addition to the regular examination fee.

The examination fee is \$5.00 for all candidates examined at points in the United States and Canada, and \$15.00 for all candidates examined at points outside of the United States and Canada. The fee (which cannot be accepted in advance of the application) should be remitted by postal order. express order, or draft on New York, to the order of the College Entrance Examination Board.

A list of the places at which examinations are to be held by the Board in 1907 will be published about March 1. Requests that the examinations be held at particular points, to receive proper consideration, should be transmitted to the Secretary of the Board not later than February 1.

#### RADCLIFFE COLLEGE.

#### ORDER OF EXAMINATIONS. (June and September.)

Monday, June 24 and September 16.

- 8-9 A. M. All candidates meet at 10 Garden Street the officer in charge of the examinations.
- 9–10. Elementary Physics. 2–4. Geometry. 10¼–11¼. Chemistry. 2–3½. Plane Geometry.
  - 11½–1. Elementary Algebra.  $3\frac{1}{2}$ – $4\frac{1}{2}$ . Solid Geometry.  $4\frac{2}{3}$ – $6\frac{1}{4}$ . Elementary French.

#### Tuesday, June 25 and September 17.

 $8\frac{1}{2}-10\frac{1}{2}$ . Elementary English.  $1\frac{3}{4}-3\frac{3}{4}$ . Elementary Greek.  $10\frac{3}{4}-12\frac{3}{4}$ . Elementary Latin. 4-6. Advanced Latin.

#### Wednesday, June 26 and September 18.

- 8-9. Logarithms and Trigonometry 2-3½. Elementary German.
- $9\frac{1}{4}-10\frac{3}{4}$ . Elementary History.  $3\frac{3}{4}-5\frac{3}{4}$ . Advanced Greek.
  - 11-1. Advanced French.

#### Thursday, June 27 and September 19.

- $8\frac{1}{2}$ - $10\frac{1}{2}$ . Advanced German.  $1\frac{1}{2}$ - $2\frac{1}{2}$ . Advanced Algebra.
- $10\frac{3}{4}-12\frac{3}{4}$ . Advanced History.  $2\frac{3}{4}-5\frac{3}{4}$ . English A.

## Friday, June 28 and September 20.

- 9–10½. Harmony. 2–3. Geography or Physiography.
- 11-1. Counterpoint.

## Saturday, June 29 and September 21.

8–9. Astronomy.  $10\frac{1}{2}-11\frac{1}{2}$ . Meteorology.  $9\frac{1}{4}-10\frac{1}{4}$ . Anatomy, Physiology, and  $11\frac{3}{4}-12\frac{3}{4}$ . Advanced Physics. Hygiene.

In June, classes from schools near Cambridge take the laboratory examinations in Physics and Chemistry on earlier days.

LABORATORY EXAMINATIONS.

#### SEPTEMBER EXAMINATIONS.

The September Examinations will be held in Cambridge only, on Monday, Tuesday, Wednesday, Thursday, Friday and Saturday, September 16, 17, 18, 19, 20, and 21.

## Examinations in French A, and German A.

The examinations in French A and German A correspond to the admission examinations in Elementary French and German, and will be held on Monday, June 24, and Monday, September 16, and on Wednesday, June 26, and Wednesday, September 18, respectively.

#### COLLEGE ENTRANCE EXAMINATION BOARD.

In June, 1907, certain papers of the College Entrance Examination Board may be substituted for certain papers set for the separate admission examinations held by Harvard University. For more particular information apply to the Secretary of Radcliffe College.

The examinations of the Board will be held June 17–22, 1907. Applications to attend the Board's examinations must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, N. Y., and must be made upon a blank form to be obtained from the Secretary of the Board upon application.

Applications for examination at points in the United States east of the Mississippi River (also at Minneapolis, St. Louis, and other points on the Mississippi River) must be received by the Secretary of the Board on or before Monday, June 3, 1907; applications for examination elsewhere in the United States or in Canada must be received on or before Monday, May 27, 1907; and applications for examination at points outside the United States and Canada must be received on or before Monday, May 13, 1907. Applications received later than the dates named will be accepted when it is possible to arrange for the examinations of the candidates concerned, but only upon the payment of \$5.00 in addition to the regular examination fee.

The examination fee is \$5.00 for all candidates examined at points in the United States and Canada, and \$15.00 for all candidates examined at points outside of the United States and Canada. The fee (which cannot be accepted in advance of the application) should be remitted by postal order, express order, or draft on New York, to the order of the College Entrance Examination Board.

A list of the places at which examinations are to be held by the Board in 1907 will be published about March 1. Requests that the examinations be held at particular points, to receive proper consideration, should be transmitted to the Secretary of the Board not later than February 1.

#### RADCLIFFE COLLEGE.

#### ORDER OF EXAMINATIONS. (June and September.)

Monday, June 25 and September 17.

All candidates meet at 10 Garden Street the officer in charge 8-0 A. M. of the examinations.

9-10. Elementary Physics.

2-3½. Plane Geometry.

10½-12 Elementary French.

2-4. Geometry.

121-11. Solid Geometry.

4½-6. Elementary German.

Tuesday, June 26 and September 18.

8-9. Physiography.

 $1\frac{1}{2}-3\frac{1}{2}$ . Elementary English (a).

4-6. Advanced Latin.

91-101. Chemistry. 103-123. Elementary Latin.

Wednesday, June 27 and September 19.

8-9. Logarithms and Trigonometry. 12-32. Advanced French. 9\(\frac{1}{4}\)-10\(\frac{3}{4}\). Elementary Algebra.

4-6. Advanced Greek.

11-121. Elementary History.

Thursday, June 28 and September 20.

8-9. Meteorology.

13-33. Advanced German.

91-111. Elementary Greek.

4-6. Advanced History.

111-121. Advanced Algebra.

Friday, June 29 and September 21.

8-11. English (b). 11-12½. Harmony.

1½-3½. Counterpoint. 4-5. Advanced Physics.

Saturday, June 30 and September 22.

 $9\frac{1}{4}-10\frac{1}{4}$ . Astronomy.

113-123. Anatomy, Physiology and Hygiene.

#### SEPTEMBER EXAMINATIONS.

The September Examinations will be held in Cambridge only, on Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, September 17, 18, 19, 20, 21, and 22.

## EXAMINATIONS IN GERMAN A, AND FRENCH A.

The examinations in German A and French A correspond to the admission examinations in Elementary German and French, and will be held on Monday, June 25, and Monday, September 17.

Monographs prepared by the students are published and sold by Messrs. Ginn & Company.

Besides the present publication, Radcliffe College issues annually a list of its Courses of Study and an Annual Report. These documents, and also separate pamphlets, published by Harvard University giving detailed accounts of the work of the principal departments, may be had by addressing

Radcliffe College,

Cambridge, Massachusetts.

c M

DMINEWALLA OF UTTINON.

OF THE
THE THROWY

# Radcliffe College

CAMBRIDGE, MASSACHUSETTS

1907

\*\*\* The legal title of the Corporation (to be used in making gifts and bequests) is "RADCLIFFE COLLEGE." It should be described as established in Cambridge, Massachusetts.

Correspondence should be addressed to RADCLIFFE COLLEGE, Cambridge, Massachusetts.

The College buildings are open to visitors interested in the work of the College, both in vacations and in term-time; though students only are admitted to the class-rooms during the hours of lectures.

The Reference Library is in the Gilman Building.

The Laboratories of Chemistry, Physics, and Botany are in buildings on the grounds.

The Laboratory of Biology occupies quarters in the University Museum in Oxford Street.

The Gymnasium is open to all students without charge.

The Dean and the Secretary may be consulted at Fay House during termtime, and special appointments may be made as required.

The President may be found at Fay House every Thursday afternoon at three during term-time.

The Academic year begins on the Thursday following the last Wednesday in September. In 1907 it is September 26. Students report for registration at 9 A. M. of that day.

The summer vacation begins on the last Tuesday in June, and ends on the last Wednesday in September.

The Christmas recess is from December 23, 1907, to Jan. 2, 1908, inclusive.

The Spring recess is from April 19 to April 25, 1908, inclusive.

## Radcliffe College.

RADCLIFFE COLLEGE, the successor of the Society for the Collegiate Instruction of Women, offers systematic collegiate instruction to women under the professors and other teachers of Harvard University. More than a hundred instructors of the University are teachers in Radcliffe College.

Fay House, 10 Garden Street, contains the offices and some of the recitation rooms. The other recitation-rooms, the library, and the gymnasium are near Fay House. The College has four laboratories, of Physics, Chemistry, Botany, and Biology. The collections of the Museum of Comparative Zoölogy, the Peabody Museum of American Archaeology, the University Museums of Geology, Botany, and Mineralogy, the Semitic Museum, and the Germanic Museum are also open to the students; and, by vote of the President and Fellows of Harvard College, the students have the use of the University Library, containing 500,000 volumes. Opportunities for study in the Astronomical Observatory, the Botanic Garden, and the Herbarium are also afforded.

The requirements for admission are identical with those for admission to Harvard College. The courses of instruction given in Radcliffe College correspond to both "Undergraduate" and "Graduate" courses offered by Harvard University, and are more than sufficient to enable a woman to perform the work required by the University for the degrees of A. B. and A. M. In addition to these, Graduate Students in Radcliffe College have access to a large number of Graduate courses in Harvard University. The examinations are the same in both institutions, and the diplomas conferring the degrees of A. B. and A. M. are countersigned by the President of Harvard University as a guarantee that these degrees are equivalent to the corresponding degrees given by the University.

For provisions for the admission of Special Students and Graduate Students, see pages 33, 34, 35, 36, 37, and 38.



## Associates of Radcliffe College.

ELIZABETH CARY AGASSIZ.

EZRA HENRY BAKER, A. B.

MARY LOWELL BARTON.

ELIZABETH BRIGGS, A. M.

LE BARON RUSSELL BRIGGS, A. M., LL. D.

WILLIAM ELWOOD BYERLY, PH. D.

ELLA LYMAN CABOT.

FREDERICK PICKERING CABOT, A. M., LL. B.

MARY COES, A. M.

MARY HUNTINGTON COOKE.

LILIAN HORSFORD FARLOW.

FREDERICK PERRY FISH, A. B.

ARTHUR GILMAN, A. M.

STELLA SCOTT GILMAN.

GEORGE LINCOLN GOODALE, M. D., LL. D.

WILLIAM WATSON GOODWIN, PH. D., LL. D., D. C. L.

JOHN CHIPMAN GRAY, LL. D.

ESTHER FISHER HALLOWELL, A. B.

CAROLINE LOUISE HUMPHREY, A. B.

AGNES IRWIN, LITT. D., LL. D.

VIRGINIA NEWHALL JOHNSON, A. B.

ALICE MARY LONGFELLOW.

ELLEN FRANCIS MASON.

FANNY PEABODY MASON.

JOHN FARWELL MOORS, A. M.

CHARLES ELIOT NORTON, LITT. D., LL. D.

FRANCES PARKMAN.

JOHN FORBES PERKINS, A. B., LL. B.

JAMES HARDY ROPES, A. B., D. D.

CLEMENT LAWRENCE SMITH, A. M., LL. D.

EZRA RIPLEY THAYER, A. M., LL. B.

JOSEPH BANGS WARNER, A. M., LL. B.

SARAH YERXA, A. B.

Honorary President
ELIZABETH CARY AGASSIZ

President

LEBARON RUSSELL BRIGGS

Dean

AGNES IRWIN

Treasurer

EZRA HENRY BAKER

Council

LEBARON RUSSELL BRIGGS, Chairman AGNES IRWIN EZRA HENRY BAKER

WILLIAM ELWOOD BYERLY

FREDERICK PICKERING CABOT MARY COES EZRA RIPLEY THAYER John Farwell Moors
Frances Parkman
William Watson Goodwin

 $\succeq Ex$  officio

ELLA LYMAN CABOT

Academic Board

WILLIAM ELWOOD BYERLY, Chairman LEBARON RUSSELL BRIGGS AGNES IRWIN

EDWARD LAURENS MARK SILAS MARCUS MACVANE HORATIO STEVENS WHITE EDWIN HERBERT HALL HERBERT WEIR SMYTH ALBERT ANDREW HOWARD GEORGE LYMAN KITTREDGE CHARLES HALL GRANDGENT

Secretary

Mary Coes

Librarian

CAROLINE FARLEY

Mistress of Bertram Hall Eliza Mason Hoppin

Director of the Gymnasium
ELIZABETH AGNES WRIGHT

## Standing Committees.

The House Committee in charge of buildings, house-service, grounds, and repairs and additions, MISS IRWIN, Chairman, Mr. Briggs (ex officio), Mr. Warner, Mr. Baker.

The Students' Committee in charge of the general discipline of the students, oversight of their homes while in Cambridge and of their amusements, clubs, and social life, Miss IRWIN, Chairman, Mrs. Cooke, Miss Coes, Mrs. Cabot, Mrs. Parkman.

The Library Committee with general supervision of the Library, Mr. Goodwin, Chairman, Mr. Briggs (ex-officio), Mrs. Farlow, Miss Irwin, Miss E. F. Mason.

The Finance Committee in charge of all matters pertaining to Expenditure, Endowment Fund, etc., Mr. Moors, Chairman, Mr. Baker, Mr. Fish, Mr. Gilman, Mr. Higginson.

The Committee on the Gymnasium, Mrs. Farlow, Miss Irwin, Miss Longfellow.

The Committee on Bertram Hall, Miss IRWIN, Chairman, Miss Humphrey, Mrs. Cooke, Miss Hopkinson, Miss Yerxa.

For the information of school officers and others, the College keeps a list of those students who have received degrees or certificates and wish to find positions as teachers.



# REQUIREMENTS FOR ADMISSION TO RADCLIFFE COLLEGE.

# ADMISSION OF CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS.

The requirements for admission to Radcliffe College are the same as those for admission to Harvard College. Radcliffe College holds no independent entrance examinations, but is authorized to make arrangements by which women may take the Harvard Examinations and have their work submitted to the Harvard Examiners. These examinations may be taken in Cambridge, and in other places in which the Harvard examinations are held in June. The September examinations are held in Cambridge only.\*

Two examinations of candidates for admission will be held in Cambridge in 1907, in Fay House. The days and hours are given in detail on page fifty-one of this pamphlet.

The academic year begins on Thursday, September 26, 1907. All Students register at the Office on that day at nine  $\Lambda$ . M.

Any one expecting to take admission examinations should register for such examinations on a form which may be obtained from the Secretary. When writing for this form she should say whether she is a Preliminary or a Final Candidate. The Registration Blanks of all candidates who wish to take examinations in June should be properly filled and in the hands of the Secretary by June 10; those of candidates who wish to take examinations in September, by September 10.

Every candidate for admission to Radeliffe College is required to furnish a certificate of honorable dismissal from the school or college which she has attended, or from the tutor with whom she has studied. She must

A fee of five dollars is to be paid by each candidate as often as she applies for examination. For this a receipt will be given, and the amount will be deducted from the first payment for tuition. The fee will not be returned to a candidate who does not enter college.

<sup>\*</sup> For the examinations of the College Entrance Examination Board see page 50.

also refer to two persons from whom information about her may be obtained. References should be sent to the Secretary of the college a month before the examination.

#### TERMS OF ADMISSION TO RADCLIFFE COLLEGE.

The studies which may be presented in satisfaction of the requirements for admission to the Freshman Class in Radcliffe College are named together in the following lists. The figure attached to each study indicates the relative weight which will be given to that study in determining the question of the candidate's fitness for admission:

Elementary

Anatomy, etc. (1)

A dvanced

	English (4) Greek (4) Latin (4) German (2) French (2)	Greek (2) Latin (2) German (2) French (2)			
History (2)	One of the following two: Greek and Roman English and American	History { One of the following five: Ancient English and American English American of Europe			
	Harmony (2)	Counterpoint (2)			
	Algebra (2) Geometry (3) or Plane Geometry (2)	Algebra (1) Logarithms and Trigonometry (1) Solid Geometry (1) Astronomy (1)			
	Physics (2) Chemistry (2) Geography (1) or Physiography (1)	Physics (2) Meteorology (1)			

A candidate for admission must offer from this list studies amounting to 26 points, of which points at least four must be in advanced studies. The studies offered must include:—

English							4		
One ancient	language	(Eler	n. La	atin c	r Ele	m.			
Greek)							4		
One modern foreign language (Elem. German									
or Elem. l	French)						2		
Elementary	History						2		
Algebra							2		
Geometry or	r Plane G	eomet	ry				3 or 2		
Studies amounting to two points from the fol-									
lowing sciences (Elem. Physics, Chemistry,									
Geography or Physiography, Anatomy,									
Physiolog							2		
							19 or 18		

No candidate may offer an Advanced study who does not at the same time or earlier offer the corresponding Elementary study; but Physics is considered Elementary with respect to Meteorology, and Geometry or Plane Geometry, with respect to Astronomy.

Candidates who are looking forward to the extended study of English or of any other modern literature are advised to acquire a knowledge of Greek as well as of Latin.

For terms of admission to advanced standing, see page 33.

## DEFINITIONS OF REQUIREMENTS.

GOOD ENGLISH.

Clear and idiomatic English is expected in all examination papers and note-books written by candidates for admission. Teachers are requested to insist on good English, not only in translations, but in every exercise in which the pupil has occasion to write or to speak English.

## 1. English.

A candidate for admission to Radcliffe College may take either of the examinations described below. If she passes English A she is exempt from the prescribed English of the Freshman year (English A); but if she passes it with Grade D she is required to take before the end of her second

year a half-course in English Composition in addition to her regular elective courses. Furthermore, on the evidence of her examination book she may be credited with an ungraded mark of "pass in Elementary English," but required to take the prescribed English of the Freshman year.

## Elementary English.

The examination will test, by means of short compositions, the candidate's spelling, punctuation, use of capital letters, grammatical accuracy, use of words, structure of sentences and of paragraphs, and in general the quality of her English. She is also expected to have a knowledge of good literature at least equal to that prescribed by the Requirements in English adopted by the Commission of Colleges in New England.

These requirements include two lists of books, all of which the candidate is expected to read. She should read them as she reads other books; she is expected, not to know them minutely, but to have freshly in mind their most important parts. In connection with the reading and study of the prescribed books she should read other books as parallel or subsidiary reading, and should commit to memory a considerable amount of English poetry.

The books for reading in 1907 and 1908 are: -

Shakspere's Macbeth and The Merchant of Venice; The Sir Roger de Coverley Papers in the Spectator; Irving's Life of Goldsmith; Coleridge's The Ancient Mariner; Scott's Ivanhoe and The Lady of the Lake; Tennyson's Gareth and Lynette, Lancelot and Elaine, and the Passing of Arthur; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

The books for study in 1907 and 1908 are:-

Shakspere's Julius Caesar; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America; Macaulay's Essay on Addison, and Life of Johnson.

The books for reading in 1909 are: -

Group I (two to be selected).

Shakspere's As You Like It, Henry V, Julius Caesar, The Merchant of Venice, Twelfth Night.

Group II (one to be selected).

Bacon's Essays; Bunyan's The Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers in the Spectator; Franklin's Autobiography.

Group III (one to be selected).

Chaucer's Prologue; Spenser's Faerie Queene (selections); Pope's The Rape of the Lock; Goldsmith's The Deserted Village; Palgrave's Golden Treasury (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, and Burns.

Group IV (two to be selected).

Goldsmith's The Vicar of Wakefield; Scott's Ivanhoe; Scott's Quentin Durward; Hawthorne's The House of the Seven Gables; Thackeray's Henry Esmond; Mrs. Gaskell's Cranford; Dickens's A Tale of Two Cities; George Eliot's Silas Marner; Blackmore's Lorna Doone.

Group V (two to be selected).

Irving's Sketch Book; Lamb's Essays of Elia; De Quincey's Joan of Arc and The English Mail Coach; Carlyle's Heroes and Hero Worship; Emerson's Essays (selected); Ruskin's Sesame and Lilies.

Group VI (two to be selected).

Coleridge's The Ancient Mariner; Scott's The Lady of the Lake; Byron's Mazeppa and the Prisoner of Chillon; Palgrave's Golden Treasury (First Series), Book IV, with especial attention to Wordsworth, Keats, and Shelley; Macaulay's Lays of Ancient Rome; Poe's Poems; Lowell's The Vision of Sir Launfal; Arnold's Sohrab and Rustum; Longfellow's The Courtship of Miles Standish; Tennyson's Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur; Browning's Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Evelyn Hope, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, The Boy and the Angel, One Word More, Hervé Riel, Pheidippides.

The books for study in 1909 are:—

Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America, or Washington's Farewell Address and Webster's First Bunker Hill Oration; Macaulay's Life of Johnson, or Carlyle's Essay on Burns.

## English A.

The examination will be adapted to the proficiency of those who have studied English composition and literature in a systematic course of three school hours or periods a week for four years, and will consist of questions in Rhetoric,\* questions in Literary History from the time of Shakspere. and compositions based on the following works:

Palgrave:

Golden Treasury (First Series)

Shakspere:

Julius Caesar

The Merchant of Venice

Macbeth

Twelfth Night or As You Like

Ιt

King Lear or Hamlet

Milton:

L'Allegro

Il Penseroso

Comus

Bunyan:

The Pilgrim's Progress, or

Defoe:

Robinson Crusoe

Dryden:

Alexander's Feast

To the Memory of Mr. Oldham

Upon the Death of the Earl of Dundee

Swift:

The Voyage to Lilliput

Addison and Steele:

The Sir Roger de Coverley Papers

Pope:

Epistle to Arbuthnot

Goldsmith:

The Vicar of Wakefield The Deserted Village

Scott:

The Lady of the Lake

Ivanhoe

Quentin Durward

Macaulay:

Life of Johnson

Lays of Ancient Rome

Byron:

Mazeppa

The Prisoner of Chillon

Irving:

The Legend of Sleepy Hollow

Rip Van Winkle

Tales of a Traveller

Thackeray:

Henry Esmond

Dickens:

A Tale of Two Cities, or

David Copperfield

Browning: Selections; for example,

Cavalier Tunes

The Lost Leader

How They Brought the Good News from Ghent to Aix

Evelyn Hope

Home Thoughts from Abroad,

<sup>\*</sup> A. S. Hill's Principles of Rhetoric is used for the corresponding study in Radcliffe College, and is recommended for use in preparation for this examination.

Home Thoughts, from the Sea Incident of the French Camp The Boy and the Angel One Word More

Hervé Riel Pheidippides

Tennyson: Selections; for example, Enid

Elaine
The Passing of Arthur
The Lady of Shalott
The Lotus Eaters

Ulysses Tithonus The Revenge

Franklin:

Autobiography

Hawthorne:

The House of the Seven Gables

Longfellow:

Tales of a Wayside Inn

Lowell:

The Vision of Sir Launfal

The candidate is expected to read all the books prescribed.\* She should read them as she reads other books,— not trying to remember them in detail, but regarding each work as a whole and giving it such appreciation as shall enable her to write about it intelligently. In every case the examiner will regard knowledge of the books as less important than ability to write English; if the examination book in English affords insufficient evidence, he will examine the written work of the candidate in other subjects.

No candidate will be accepted in English whose work is seriously faulty in spelling, grammar, punctuation, or division into paragraphs.

Throughout the course frequent short compositions should be required as well as occasional long ones. Topics should be chosen by the pupil herself whenever that is possible; and the topics assigned by the instructor should be within the range of the pupil's knowledge and sympathies, and should be such as to awaken interest and stimulate intelligence. Criticism should be constant and thorough; it should take account of merits as well as of faults, and should never interfere with the honest expression of opinion or with the free play of individuality in thought and expression. Mechanical methods of every kind should be avoided; and attention should be fixed on principles rather than rules.

As to the right way of studying Rhetoric, attention is called to the following extract from the Report of the Vassar Conference: †

"Though it is clear that the power to write a language can be obtained only by unremitting practice, yet, in the opinion of the Conference, such

† Report of the Committee of Ten, page 95, section 8.

<sup>\*</sup> In connection with the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry committed to memory.

practice may properly be accompanied and illustrated by a course in elementary rhetoric. This course should include not only the principles of clearness, force, and good taste, but the principles of the arrangement of clauses in the sentence and of sentences in the paragraph. The teacher should bear in mind that any body of written English, of whatever length, is an organic unit, with principles that apply as well to the arrangement of the minor elements as to the grouping of the larger divisions of essay or book. Especial care should be taken that rhetoric is not studied by itself or for its own sake. Its connection with the pupil's actual written or spoken exercises should be kept constantly in view."

## 2, 3. Greek.

## 2. Elementary Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least *two* school years. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of simple Attic prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) A thorough examination on a prescribed portion of Xenophon (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Attic prose, involving the use of such words, constructions, and idioms only as occur in the portion of Xenophon prescribed.

The portion of Xenophon prescribed for this examination is the first book of the Anabasis, chapters i-viii. Two years' notice will be given of any change in the selection.

#### 3. Advanced Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least *three* school years. The second part of the examination (Greek Composition) is optional, but candidates are advised to try this

<sup>\*</sup> The pages of the more recent Teubner text editions are taken as a standard in this statement.

part of the paper, since a fair translation will offset deficiencies in the

preceding part.

(a) The translation at sight of Attic prose and of Homer, with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. There will also be questions on the Homeric poems and Homeric life. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into Attic prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Greek prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the elementary and advanced examinations in Greek is based on the assumption that the candidate has begun the study of Latin at least a year earlier, and has continued it along with her Greek course; otherwise the periods specified would not be sufficient.

In preparation for the elementary examination in Greek, candidates should read from 130 to 170 pages \* of Attic prose. For the advanced examination candidates should read from 30 to 50 pages more of Attic prose, and from 3000 to 5000 verses of Homer. The reading of Homer may be advantageously begun with a thorough study of Iliad, Books I and II (to the catalogue of ships).

The pupil should be constantly guided in proper methods of reading, and trained to read the Greek intelligently, as Greek, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Greek, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Greek Composition, pupils should be trained, from an early stage of the preparatory course, to render into Greek, not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

<sup>\*</sup> The pages of the more recent Teubner text editions are taken as a standard in this statement.

#### 4, 5. Latin.

## 4. Elementary Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least three school years. The passages set for translation must be rendered into simple and idiomatic English. The three parts of the examination cannot be taken separately:—

(a) The translation at sight of simple Latin prose.

(b) An examination (which may include translation) on the first four books of Virgil's Aeneid, or on selected myths from Ovid's Metamorphoses, with questions on the subject-matter and on literary and historical allusions. Two years' notice will be given of any change in these alternative requirements.

(c) An examination directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose.

#### 5. Advanced Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *four* school years. The passages set for translation must be rendered into simple and idiomatic English. The three parts of the examination cannot be taken separately:—

(a) The translation at sight of Latin prose and verse, with questions on ordinary forms, constructions, and idioms, and on prosedy.

(b) An examination (which may include translation) on Cicero's four speeches against Catiline and the Defence of Archias; with questions on the subject-matter, the life of Cicero, and his position in literature.

(c) The translation into Latin prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the examinations in Latin is made with reference to schools which have a four years' course. Schools which have a five years' course may more advantageously provide for beginning the study of Latin in the first year, with some dim-

#### ELEMENTARY AND ADVANCED LATIN.

The definitions of Elementary and Advanced Latin for admission have been changed to read as follows:—

Elementary Latin.— The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least three school years. The passages set for translation must be rendered into simple and idiomatic English. The three parts of the examination cannot be taken separately:—

- (a) The translation at sight of simple Latin prose.
- (b) An examination (which may include translation) on the first four books of Virgil's Aeneid, or on selected myths from Ovid's Metamorphoses, or on selected speeches\* of Cicero, with questions on the subject-matter and on literary and historical allusions. Two years' notice will be given of any change in these alternative requirements.
- (c) An examination directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose.

Advanced Latin.— The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least four school years. The passages set for translation must be rendered into simple and idiomatic English. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of Latin prose and verse, with questions on ordinary forms, constructions, and idioms, and on prosody.
- (b) The translation into Latin prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

<sup>\*</sup>The speeches of Cicero referred to in the definition of Elementary Latin are the speeches on the Manilian Law, Catiline, Archias, Marcellus.



inution, if necessary, of the time devoted to it in the last years of the course.

The course of reading pursued in preparation for the examinations in Latin should include: —

- (a) Easy reading, included in or following a suitable introductory book ('Latin Lessons'), amounting to from 30 to 40 pages; \*
  - (b) Nepos (Lives) and Caesar (Gallic War), 90 to 120 pages;
- (c) Cicero, 90 to 120 pages, including the four speeches against Catiline and the Defence of Archias, with additional speeches selected by the teacher;
- (d) Virgil and Ovid, 6000 to 10,000 verses, including the first six books of the Aeneid.

Preparation for the elementary examination alone should include (a) and (b), about 40 pages of Cicero, and either the first four books of Virgil's Aeneid, or the following myths from Ovid's Metamorphoses: Deucalion, Daphne, Phaethon, Cadmus, Pyramus, Andromeda, Proserpina, Niobe, Medea, Meleager, Philemon, Atalanta, Midas, Alcyone, Galatea.

The pupil should be constantly guided in proper methods of reading, and trained to read the Latin intelligently, as Latin, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Latin, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the advanced examination in Latin Composition, pupils should be trained, from an early stage of the preparatory course, to render into Latin not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

## 6, 7. German.

## 6. Elementary German.

- (a) The translation at sight of simple German prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of simple English sentences, or of easy connected prose, to test the candidate's familiarity with elementary grammar.

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than two hundred pages of easy German (including reading at sight in class).

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugation of the weak and the more usual strong verbs; the declension of articles, adjectives, pronouns, and such nouns as are readily classified; the commoner prepositions; the simpler uses of the modal auxiliaries; the elements of syntax, especially the rules governing the order of words.

Pronunciation should be carefully taught, and the pupils should have frequent opportunities to hear German spoken or read aloud. The writing of German from dictation is recommended as a useful exercise.

#### 7. Advanced German.

(a) The translation at sight of ordinary German. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into German of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of those who have read, in addition to the amount specified under Elementary German, not less than five hundred pages of classical and contemporary prose and verse. It is recommended that the reading be selected from such works as the following: Riehl, Culturgeschichtliche Novellen; Freytag, Bilder aus der deutschen Vergangenheit, Die Journalisten; Kohlrausch, Das Jahr 1813; Schiller, Der dreissigjährige Krieg, Wilhelm Tell, Maria Stuart, Die Jungfrau von Orleans; Goethe, Hermann und Dorothea, Egmont, Iphigenie; Lessing, Minna von Barnhelm. About one half of the amount read should be Nineteenth Century prose.

In the translation into German candidates will be expected to show a thorough knowledge of accidence, the elements of word-formation, the principal uses of prepositions and conjunctions and the essentials of syntax, especially the uses of the modal auxiliaries, and of the subjunctive and infinitive modes.

It is recommended that the candidate be trained to follow a recitation conducted in German and to answer in that language questions asked by the instructor.

#### 8, 9. French.

## 8. Elementary French.

(a) The translation at sight of ordinary Nineteenth Century prose. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into French of simple English sentences or of easy connected prose, to test the candidate's familiarity with elementary grammar. Proficiency in grammar may also be tested by direct questions, based on the passages set for translation under (a).

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than four hundred pages (including reading at sight in class) from the works of at least three different authors. It is desirable that a portion of the reading should be from works other than works of fiction.

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugations of regular verbs, of the more frequent irregular verbs, such as aller, envoyer, tenir, pouvoir, voir, vouloir, dire, savoir, faire, and those belonging to the classes represented by ouvrir, dormir, connaître, conduire, and craindre; the forms and positions of personal pronouns and of possessive, demonstrative, and interrogative adjectives; the inflection of nouns and adjectives for gender and number, except rare cases; the uses of articles, and the partitive constructions.

Pronunciation should be carefully taught, and pupils should have frequent opportunites to hear French spoken or read aloud. The writing of French from dictation is recommended as a useful exercise.

### 9. Advanced French.

- (a) The translation at sight of standard French. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of candidates who have read, in addition to the amount specified under Elementary French, not less than six hundred pages of prose and verse from the writings of at least four standard authors. A considerable part of the amount read should be carefully translated into idiomatic English.

Candidates will be expected to show a thorough knowledge of accidence and familiarity with the essentials of French syntax, especially the uses of tenses, modes, prepositions, and conjunctions.

It is recommended that the candidate be trained to follow a recitation conducted in French and to answer in that language questions asked by the instructor.

## 10, 11. History (including Historical Geography).

## 10. Elementary History.

Either of the two following groups, each including two fields of historical study: —  $\,$ 

- 1. Greek and Roman History.— (a) Greek History to the death of Alexander, with due reference to Greek life, literature, and art. (b) Roman History to the accession of Commodus, with due reference to literature and government.
- 2. English and American History.—(a) English History, with due reference to social and political development. (b) American History, with the elements of Civil Government.

For preparation in each of the two historical fields presented, a course of study equivalent to at least three lessons a week for one year will be necessary.

The candidate will be expected to show on examination such general knowledge of each field as may be acquired from the study of an accurate text-book of not less than 300 pages, supplemented by suitable parallel readings amounting to not less than 500 pages. The examination will call for comparison of historical characters, periods, and events, and in general for the exercise of judgment as well as of memory. Geographical knowledge will be tested by means of an outline map.

In the judgment of the Department of History it is desirable that Greek and Roman History be offered as a part of the preparation of every candidate.

## 11. Advanced History.

Any one of the three courses of study which follow: -

- 1. Greek History to the destruction of Corinth and Roman History to the death of Constantine (open to those candidates only who have offered English and American History as an elementary study).
- 2. English History and American History (open to those candidates only who have offered Greek and Roman History as an elementary study).
- 3. European History from the Germanic conquests to the beginning of the Seventeenth Century.

In 1907 and 1908 papers will be set in English and American History taken together and in English and in American History separately. After 1908 the paper in English and American History will be withdrawn. Candidates may obtain credit for Advanced History (2 points) by passing any one of these three examinations, if they take or have taken Elementary Greek and Roman History.

In every case the candidate will be expected to show on examination such an acquaintance with the whole field as may be gained from the study of good text-books, together with substantial parallel readings, and, further, such a detailed knowledge of some part of the field as may be gained from suitable topical study. A higher standard of acquirement and of power to combine results will be expected than in the elementary requirement.

As further evidence of the candidate's proficiency satisfactory written work, done at school and certified by the teacher, must be submitted at the time of the examination. It must be presented in the form of a notebook (or bound collection of notes), containing not less than 50 written pages on each historical field offered, and must show practice in some of the following exercises:—

- (a) Notes and digests of the pupil's reading outside of the text-books.
- (b) Brief written tests requiring the application to new questions of knowledge previously acquired.
  - (c) Parallels between historical characters or periods.
- (d) Short studies of topics limited in scope, prepared outside of the classroom and illustrated by some reference to contemporary material.
- (e) Historical maps or charts showing explorations, migrations, conquests, territorial changes, or social conditions.

#### 12, 13. Music.

## 12. Harmony.

The examination will be adapted to the proficiency of those who have studied Harmony in a systematic course of three lessons a week through one school year. Proficiency in pianoforte playing, and the ability to read chorals and moderately easy piano pieces at sight will be required.

The examination will test

- I. The accuracy of the candidate's knowledge of the following points:
- a. Notation; Clefs; Signatures; Diatonic and Chromatic Intervals and their inversions; Consonance and Dissonance; Major and Minor diatonic scales; Chromatic Scale; Natural Harmonic Series.
  - b. Triads of the Major and Minor modes.
- c. Rules of Chord-connection; Range of voices; Open and Close harmony; Tonality.
- d. Inversions of Triads; Principles of doubling voices in chords, especially in successive Sixth-chords.
- e. Chords of the Dominant Seventh, and Diminished Seventh; Preparation and Resolution.
  - f. Secondary Seventh-chords.
  - g. Principles of key-relationship; Simple modulation.
- II. Her analytical knowledge of ninth chords, altered chords (including augmented chords), non-harmonic tones, suspensions, and pedal point. (Students should be encouraged to apply this knowledge in their harmonization).

Preparation for this examination should consist of systematic practice in the harmonization of simple melodies in soprano and in bass. All exercises should be written in a clear and well-formed notation. *Modern Harmony*, by Foote and Spalding, is used in the College Course corresponding to this requirement, and is recommended for use in preparation for the examination.

## 13. Counterpoint.

The examination will be adapted to the proficiency of those who have studied Counterpoint in a systematic course of three lessons a week through one school year, and presupposes training in pianoforte playing. As counterpoint applies the principles of harmony to the melodious treatment of the several voice-parts in combination, and as the art of musical composition begins properly with this study, the work should consist principally of written exercises on given themes, in the following order:—Chorals and melodies harmonized, with a free use of passing notes; the several orders of Counterpoint in two, three, and four voices, with and without cantus firmus; Double Counterpoint; Free Imitative Counterpoint; Analysis of the Two-part Inventions and Fugues of Sebastian Bach; Simple forms of free composition, Organ Preludes, Two-part inventions, and Part Songs.

Students should use as models simple organ compositions and part-songs of modern composers. For the exercises in counterpoint the alto and tenor clefs should be used.

#### 14, 17. Mathematics.

A thorough practical acquaintance with ordinary Arithmetic is assumed as underlying all preparation in Mathematics. Knowledge of the fundamental principles of Arithmetic and careful training in accurate computation with whole numbers and with vulgar and decimal fractions form an essential part of early school work. But the pupil's time should not be wasted in the solution by arithmetic of puzzling problems which properly belong to algebra, or in complicated and useless reductions, or in the details of commercial arithmetic. It is desirable that some familiarity with algebraic expressions and symbols, including the methods of solving simple equations, be acquired in connection with the course in Arithmetic.

## Elementary Mathematics.

14. Elementary Algebra.— Algebra, through Quadratic Equations. The requirement in Algebra includes the following subjects: factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem for positive integral powers of the binomial, and the extraction of roots; arithmetical and geometrical progressions; putting questions into equations and the reduction of equations; the ordinary methods of elimination and the solution of both numerical and literal equations of the first and second degrees with one or more unknown quantities and of problems leading to such equations.

The student should cover carefully the whole ground here specified, and should acquire a thorough understanding not only of the practice, but of the reasons involved in the elementary algebraic rules; for example, in the rules of multiplication, of signs, and of exponents, in the rules for fractions, and in those relating to the reduction and solution of equations. She should train herself to practical skill by the solution of a large number of examples, and should learn to do her work with reasonable quickness, as well as with confidence, accuracy, and clearness. The solution of fairly complicated literal quadratics, the various methods of elimination for equations of the first two degrees, the putting of problems in a neat manner into equations, and the working of the various algebraic operations both for integral and fractional expressions may be mentioned as important subjects of attention. The student should be taught to arrange her work in a clear, orderly, and compact fashion.

The time supposed to be devoted to the systematic study of the requirement in Algebra is the equivalent of a course of three lessons a week through two school years.

15. Geometry.— Plane and Solid Geometry, including problems in mensuration of plane and solid figures, and original propositions in Plane Geometry.

Geometric education should begin in the kindergarten or primary school, where the child should acquire familiarity through the senses with simple geometric forms, by inspecting, drawing, modelling, and measuring them, and noting their more obvious relations. This study should be followed, in the grammar school, by systematic instruction in Concrete (or Observational) Geometry, of which geometric drawing should form a part. Such instruction should include the main facts of Plane and Solid Geometry, treated as matters of observation, and not as exercises in logical deduction, without however necessarily excluding the beginnings of deductive proof as soon as the pupil is ready for them. Concrete Geometry is believed to have important educational value, and to prepare an excellent foundation for the later study of Formal Geometry. It belongs, however, to the earlier stages of school work, and should not be postponed until the time that belongs to direct preparation for college or the scientific school.

In teaching Formal Geometry, stress should be laid from the outset on accuracy of statement and elegance of form, as well as on clear and strict reasoning. As soon as the pupil has begun to acquire the art of rigorous demonstration, her work should cease to be merely receptive, she should be trained to devise constructions and demonstrations for herself, and this

training should be carried through the whole of the work in Plane Geometry. Teachers are advised, in their selection of a text-book, to choose one having a clear tendency to call out the pupil's own powers of thought, prevent the formation of mechanical habits of study, and encourage the concentration of mind which it is a part of the discipline of mathematical study to foster. The subject of Geometry, not a particular treatise, is what the pupil should be set to learn; and its simpler methods and conceptions should be made a part of her habitual and instinctive thought. Lastly, the pupil should be stimulated to good work by interest in the study felt and exhibited by the teacher.

The requirement in Geometry embraces the following topics: the general properties of plane rectilinear figures; the circle and the measure of angles; similar polygons; areas; regular polygons, and the measure of the circle; the relations of planes and lines in space; the properties and measure of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle. The propositions required under these several heads are those only which are contained in the older treatises, and which are recognized as constituting the Elements of Geometry. The examination does not include the additions introduced into some recent text-books, although most of those additions are in themselves valuable for the student who has time and taste for extra study in this field. A syllabus of the required propositions has been prepared. [This syllabus may be obtained, price 10 cents, at the Publication Office, 2 University Hall, Cambridge.]

The examination in Geometry also includes original propositions in Plane Geometry, based on the propositions named in the syllabus, and problems in mensuration in both Plane and Solid Geometry; but excellence in bookwork and in exercises immediately illustrating bookwork will be allowed to offset in part any lack of skill in original work.

The time which it is recommended to assign to the systematic study of the requirement in Formal Geometry is the equivalent of a course of five lessons a week for one school year; but it is believed to be advisable to extend this allowance of time over two years.

## 15a. Plane Geometry.

The requirement in Plane Geometry is stated on pages 1-14 of the Syllabus mentioned above.

#### Advanced Mathematics.

15b. Solid Geometry.— Chauvenet's Geometry, Revised and Abridged (Philadelphia: J. B. Lippincott & Co.), Books VI, VII, VIII, and IX, will

serve to indicate the nature and amount of the requirement in Solid Geometry.

16. Logarithms and Trigonometry.— The theory of logarithms and the use of logarithmic tables.— Plane trigonometry.— The solution of the right spherical triangle.— Applications to simple problems.

No technical knowledge of the subjects of surveying and navigation, such, for instance, as the methods of parallel or middle latitude sailing, will be required, but such terms as latitude, longitude, angle of elevation or depression, bearing, etc., should be understood. At the examination, candidates are furnished with four-place tables belonging to the University, and are not allowed to use their own tables. The tables provided are distributed before the hour of examination, so that candidates may have at least an hour for becoming acquainted with their arrangement and use. Teachers who wish a still earlier opportunity of seeing these tables should write to the Secretary of Radcliffe College.

## 17. Advanced Algebra.

The requirement in Advanced Algebra includes the following subjects:

- (a) Simultaneous quadratics and equations solved like quadratics; properties of quadratic equations; addition, subtraction, multiplication and division of complex quantities; inequalities; variations; arithmetical and geometrical progressions; mathematical induction; simple problems in choice and chance; continued fractions; scales of notation.
- (b) Determinants, not including the multiplication theorem; simple applications of determinants to linear equations; the solution of numerical equations of higher degree, and so much of the theory of equations (not including multiple roots or Sturm's theorem) as is necessary for this purpose.

The topics included under (a) may be treated briefly. About half the time devoted to the requirements should be spent on the topics included under (b).

## 18-24. Physical Science. \*

## Elementary Physical Science.

- 18. Elementary Physics.—A course of study dealing with the leading elementary facts and principles of physics, with quantitative laboratory work by the pupil.
- \* For rules relating to the time of handing in note-books and to candidates examined in June in places where no laboratory examination is provided, see p. 31.

The instruction given in this course should include qualitative lecture-room experiments, and should direct especial attention to the illustrations and applications of physical laws to be found in every-day life. The candidate is required to pass a written examination, the main object of which will be to determine how much she has profited by such instruction. This examination may include numerical problems. It will contain more questions than any one candidate is expected to answer, in order to make allowance for a considerable diversity of instruction in different schools.

The pupil's laboratory work should give practice in the observation and explanation of physical phenomena, some familiarity with methods of measurement, and some training of the hand and the eye in the direction of precision and skill. It should also be regarded as a means of fixing in the mind of the pupil a considerable variety of facts and principles. The candidate is required to pass a laboratory examination, the main object of which will be to determine how much she has profited by such a laboratory course.

The candidate must name as the basis for her laboratory examination at least thirty-five exercises selected from a list of about sixty, described in a publication issued by Harvard University under the title, "Descriptive List of Elementary Exercises in Physics." [This list may be obtained, price 40 cents, at the Publication Office, 2 University Hall, Cambridge.] In this list the divisions are mechanics (including hydrostatics), light, heat, sound, and electricity (with magnetism). At least ten of the exercises selected must be in mechanics. Any one of the four other divisions may be omitted altogether, but each of the three remaining divisions must be represented by at least three exercises.

The candidate is required to present a note-book in which she has recorded the steps and the results of her laboratory exercises, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes. These exercises need not be the same as those upon which the candidate presents herself for the laboratory examination, but should be equivalent to them in amount and grade of quantitative work.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attain-

ments in physics. Experience has shown that pupils can make the original record of their observations entirely presentable, so that copying will be unnecessary, and they should in general be required to do so.

This course, if taken in the last year of the candidate's preparation, is expected to occupy in laboratory work, recitations, and lectures, five of the ordinary school periods, about fifty minutes in length, per week for the whole year. With few exceptions exercises like those in the Descriptive List already mentioned can be performed in a single school period, but for satisfactory results it will often be necessary to repeat an exercise. Two periods per week for the year should be sufficient for the laboratory work proper. If the course is begun much earlier than the last year of the candidate's preparation, as it well may be, it will require more time.

19. Chemistry.\*—A course of at least sixty experiments, performed at school by the pupil and accompanied with systematic instruction in principles and their applications, in accordance with directions given in a pamphlet entitled "An Outline of Requirements in Chemistry," issued by Harvard University for the use of teachers only.

The candidate is required to pass both a written and a laboratory examination. The written examination will test her acquaintance with the facts and principles of Chemistry. The laboratory examination will test both her skill in performing experiments and her grasp of the principles involved in them. The candidate is further required to present the original note-book in which she recorded the steps and results of the experiments which she performed at school, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in Chemistry.

20. Physiography.— A course of study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Physiography," issued by Harvard University.

<sup>\*</sup> The course will be mainly an experimental course in theoretical chemistry, but there will be experiments covering all branches of pure chemistry.

For the form of examination see note under Astronomy, below.

After 1908 the examinations in Physiography and Meteorology will be withdrawn, and in place of them will be substituted an examination in Geography. Geography may be substituted for Physiography in 1907.

- **20a.** Geography.— A course of study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Geography," issued by Harvard University.
- 21. Anatomy, Physiology, and Hygiene.— A course of study and laboratory work equivalent to that described in a pamphlet entitled "An Outline of Requirements in Anatomy, Physiology, and Hygiene," issued by Harvard University.

The candidate will be required to pass both a written and a laboratory examination. The written examination will test the range and thoroughness of her knowledge of the elements of Anatomy, Physiology, and Hygiene. The laboratory examination will test (a) her ability to perform the experiments described in the Outline of Requirements, and (b) her knowledge of the first aids to be rendered to the injured.

At the time of the laboratory examination the candidate must present the original note-book containing (with dates) the notes and drawings she has made in the course of her laboratory work, and bearing the endorsement of her teacher, certifying that the book is a true record of the pupil's own observations and experiments. An index of subjects should be appended.

## Advanced Physical Science.

## 22. Advanced Physics.\* (This requirement will be discontinued after the year 1907.)

The College does not prescribe the experiments to be performed by those offering this subject for admission. The work should, however, be of advanced grade, almost wholly quantitative, and conducted with apparatus not necessarily elaborate, yet capable, if carefully handled, of yielding results of such accuracy as to warrant the consideration of somewhat minute error. For example, the balance used in weighing should be so delicate as to justify corrections for the buoyancy of the air on the weights and on the body weighed, and, in the determination of specific gravity, for the temperature of the water. The results should be discussed with reference to their precision and to the number of significant figures. There should be

<sup>\*</sup> Equivalent to, but not necessarily identical with, Physics C.

about sixty experiments well distributed through the range of general physics. If the student has devoted a considerable amount of time in the elementary course to experiments in heat, that division of physics may be here omitted. The laboratory work can be performed properly only in periods of considerable length, two to four hours, for example.

Instruction by lectures or text-books and work in problems should be a

part of the course.

The candidate will be required to pass both a laboratory and a written examination. She should so thoroughly understand the work which she has performed as not to be confused in the laboratory examination by unfamiliar forms of apparatus.

The laboratory note-book will receive careful attention at the time of the examination. It must contain a certificate from the teacher that it is

a true record of the candidate's work.

23. Meteorology.— A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Meteorology," issued by Harvard University.

This course requires a knowledge of Elementary Physics. (For the

form of examination see under Astronomy, below.)

After 1908 the examinations in Physiography and Meteorology will be withdrawn, and in place of them will be substituted an examination in Geography. (See 20a.)

24. Astronomy.— A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Astronomy," issued by Harvard University.

This course requires a knowledge of Geometry.

In Physiography, Meteorology, and Astronomy, the candidate will be required to take both a written and a laboratory or practical examination. The written examination may test her understanding of observational methods appropriate to the subject, but will call chiefly for a knowledge of facts and principles. The laboratory or practical examination will test her skill in observation as well as her grasp of principles. This examination can be taken in Cambridge only; for those who are examined elsewhere in June, it will be postponed to September.

The laboratory examination in Physiography may include the description, explanation, and comparison of geographical features shown in photographs, maps and models. The laboratory examination in Meterology may include the use of instruments, the discussion of observations, and the

construction and interpretation of weather maps and climatic charts. The practical examination in Astronomy may call for an ability to make simple naked-eye and instrumental observations, and to establish the simpler generalizations of astronomy by discussion of these observations.

The candidate in these subjects will be required to present, at the time of the laboratory or practical examination, the original note-book in which she recorded, with dates, the steps and results of the observations which she made at school. This book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. An index of subjects should be appended. The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of her work through an extended course of observational study, and that her work has been of a satisfactory character; but greater weight will be given to the practical or laboratory examination than to the note-book in determining the candidate's attainments.

#### LABORATORY EXAMINATIONS.

A candidate who is examined in any study in which a laboratory examination is held will hand in her laboratory note-book at the hour of the laboratory examination. Laboratory note-books will be deposited, after examination, in the Secretary's office, where they will be kept for a reasonable time, subject to the order of the owners.

A candidate examined in June at any place where a laboratory examination is not provided will be required to take such an examination in Cambridge in the autumn of the year in which she enters College; but if she passes the written examination in June, the subject will be temporarily counted in her favor in determining the question of her admission to College.

#### EXAMINATION PAPERS.

A set of recent examination papers will be sent free to any address, on application to the Secretary.

Separate papers may be had in quantities of not less than six copies of any one paper, (not one each of six different papers) at ten cents a dozen, on application to the Publication Agent of Harvard University, 2 University Hall, Cambridge.

#### CERTIFICATES.

The College does not accept certificates of secondary schools in place of entrance examinations. The testimony of teachers is, however, highly valued and is given special consideration in all cases in which the evidence of examinations appears inconclusive. On the receipt of each application for admission a blank form will be sent to the headmaster of the school, requesting the candidate's record and any facts about her character and scholarship which will be helpful to the Committee on Admission.

#### CERTIFICATES FOR PRELIMINARY EXAMINATIONS.

A Preliminary examination is an examination taken at any period (June or September) antecedent to the Final examination at which the candidate completes her admission record. If a candidate divides her examinations among several periods, those of every period except the last are Preliminary. At each registration for Preliminary examinations the candidate must present a certificate from her school or tutor, naming the subjects in which she is recommended. A candidate passing Preliminary examinations will be credited only with those subjects in which she is recommended.

## CERTIFICATES OF HONORABLE DISMISSAL.

Every candidate for admission is required to furnish a certificate of honorable dismissal from the school or college she has attended, or from the tutor with whom she has studied. If a candidate has within a year left one school for another, or for a private tutor, any certificate received from the second school or private tutor must be accompanied by the written consent of the principal of the first school.

#### OPTIONAL EXAMINATIONS.

A candidate who has extended her studies beyond the requirements for admission may present herself for examination in additional studies and thus qualify herself to pursue more advanced courses in those subjects in College-and anticipate work which counts towards a degree. She may anticipate the prescribed English of the Freshman year by English A; and if she passes both Elementary German and Elementary French she will not be required to take German A or French A, as the case may be. Other entrance examinations, especially those in Advanced Studies, correspond to elective courses taught in College; and the standard of the entrance examinations is intended to be the same as that of the correspond-

ing College courses.\* Examinations in elective studies that are not equivalent to admission studies may also be taken provided the courses are of such a character that they may properly be anticipated by examination, but the number of courses that may thus be anticipated is very small. Such examinations are held only in the first fortnight of the academic year and only at Cambridge. Written notice of intention to take these examinations must be in the hands of the Secretary not later than September 10.

#### Admission to Advanced Standing.

Graduates of other colleges and students who have completed creditably the work of at least one year at other colleges may be admitted without examination to the standing for which their previous training seems to qualify them.

Every person wishing to enter under this provision must make a complete written statement of the work on which she bases her application. Blank forms of application for admission may be obtained from the Secretary.

Much importance is attached to the quality of the work offered. The applicant should furnish: (1) official statements of her rank or grade in her various college studies: (2) letters, or other evidence, showing the opinion her instructors have formed of her character and scholarship: (3) a letter of honorable dismissal from the college whence she comes.

#### SPECIAL STUDENTS.

Applicants who pass a satisfactory examination on a smaller number of subjects than are called for in the full Requirements may be admitted, at the discretion of the Academic Board, to such special courses as they seem qualified to pursue.

Students of mature age, who wish to pursue chiefly higher courses of study, may be admitted, at the discretion of the Academic Board, without passing the examination for admission, provided that they satisfy the instructors in the courses which they elect of their fitness to pursue them.

\* The following are the College courses to which admission studies correspond: Advanced German corresponds to German 1a, Advanced French to French 1a, Solid Geometry to Mathematics E¹, Advanced Algebra to Mathematics D², and Meteorology to Geology B². Elementary German, French, Physics, and Physicography correspond to German A, French A, Physics B, and Geology A¹, respectively. Elementary and Advanced German taken together correspond to German B.

Every special student is expected to take four courses of study.

Special students may, on application, receive, at the end of their term of study, certificates stating the courses in which they have passed satisfactory examinations, and giving the grade to which they have been assigned in each course.

Special students should make application before the first day of September.

#### STUDENTS AND EXAMINATIONS.

Undergraduates are expected to make their choice of elective studies before the first day of September, and no changes are allowed after October 1, except by leave of the Academic Board. Applications for changes must be made to the Academic Board in writing, with a statement of reasons.

The student's choice is limited to those studies which her previous training qualifies her to pursue; and she must observe any restrictions that may be attached to the particular courses she wishes to select. She is further required to avoid any conflict of recitation hours or of examinations between her courses.

No starred (\*) course may be chosen without the *previous* consent of the Instructor. Application should be made, if possible, before the summer vacation.

An undergraduate who wishes to take a Graduate course is required to consult the Instructor in advance; if possible she should do this before the summer vacation. She will be admitted to the course on the recommendation of the Instructor, which must be given in writing.

Not more than one Course of Research may be taken in any year by an undergraduate.

All students are expected to attend all the exercises and to pass all the examinations in the courses which they elect, unless excused by special vote of the Academic Board. Applications for excuses must be made to the Secretary in writing with the reasons.

#### LODGINGS FOR STUDENTS.

Students may learn of lodging-places approved by the Students' Committee by enquiring of the Dean. The ladies of the Standing Committees will be glad to assist students by their advice.

Bertram Hall, the first hall of residence in Radcliffe College, was opened

in 1901. It provides accommodations for twenty-five students and is under the charge of a resident mistress, Miss E. M. Hoppin. The hall is situated in Shepard Street, seven minutes walk from Radcliffe College. The price of board is \$6.00 a week for the 36 weeks from the last Wednesday in September to the day before Radcliffe Class Day, exclusive of the Christmas and the Spring recess, as fixed by the College catalogue. Students may remain until the day after Radcliffe Commencement on payment of \$6.00 for the week's board. The charge for rooms is from \$100.00 up. These charges include all expenses of furnishing, service, heating and light, except open fires and washing. Applications for rooms in Bertram Hall must be sent before May 1st to Miss Caroline L. Humphey, 23 Maple Ave., Cambridge.

All arrangements for boarding and lodging are to be subject to the approval of the Dean.

Any change of address must be at once reported to the Dean and to the Secretary.

#### GRACE ELIOT HALL.

A second hall of residence, Grace Eliot Hall, will be opened in September, 1907. It will provide accommodations for forty students and will be under the charge of a resident mistress. The Hall is situated in Shepard Street, next door to Bertram Hall. For further information address the Dean of Radcliffe College. Application should be made as soon as possible.

#### GRADUATE STUDENTS.

#### Admission.

Bachelors of Arts of Radcliffe College, and Graduates of other Colleges of good standing who present satisfactory evidence of character and qualifications, are admitted without examination as Graduate Students in Radcliffe College.

An application for admission may be made by filling out a registration blank and depositing it at the office. If the applicant is not a graduate of Radcliffe College, she must also file, for the consideration of the Academic Board, satisfactory certificates of scholarship and character; and if she holds a degree from any institution, she must present diplomas or official certificates, sufficient to furnish evidence of her holding such degree or degrees.

Admission as a Graduate Student does not imply admission to candidacy for a Degree.

Graduate Students, not Bachelors of Arts of Radcliffe College, who wish to become candidates for any degree, should make early application, at the beginning of the Academic Year if possible, in order to learn the conditions under which they may be accepted as qualified for candidacy.

#### RESIDENCE.

Graduate Students are required to be in regular attendance on the exercises in some course or courses of instruction, and to do all the required work (including all examinations) in the courses which they elect; or to carry on regular work in some Laboratory or Museum or in the Library, under the frequent inspection and criticism of some specified instructor or instructors.

#### STUDIES.

The instruction open to students in Radcliffe College is arranged in one list of Courses of Instruction, consisting of Full Courses and Half-Courses. These are distributed into *three groups* in the several branches of study, namely,

- (1) Courses designed primarily for Undergraduates.
- (2) Courses for Graduates and Undergraduates.
- (3) Courses primarily for Graduates.

Any course (or half-course) in the list is open to all Graduate Students who present sufficient evidence of qualification for that course. It is sometimes advisable, and is not unusual, for a graduate student to choose some of her studies from the First, or Undergraduate, Group; but such studies are not ordinarily counted for the degree of A. M. Many of the studies of the Second Group are distinctly of Graduate grade, in the sense of being in advance of such as are ordinarily pursued for a Bachelor's degree. They are thorough and comprehensive courses, characterized by advanced methods of instruction and study; and are in fact largely chosen by Graduate Students, and found suitable to their needs. To some of these courses, undergraduates are admitted only by special leave of the instructor. To the courses of the Third Group, undergraduates are admitted only on the recommendation of the instructor.

Among the higher courses of instruction - of the Second and Third

Groups — in nearly every department of study, are Courses of research and Seminaries, for students who wish to do special work of an advanced character. These courses are carried on under various plans of administration in the several departments, but always with the object of affording opportunity for regular independent study.

A complete year's work for a Graduate Student regularly consists of four full courses of instruction, of advanced grade, or of their equivalent in courses and half-courses, pursued throughout an academic year. If the work is to be counted toward a degree it must be completed with distinction. All the work required in such courses must be done, and all the examinations must be passed; unless the student has leave from the Academic Board, with the approval of the Instructor, to omit some part of the ordinary requirement.

Every Graduate Student is required to file a list of her studies for the year (or at least for the first half-year), at the time she registers, with the Secretary,— or within two days thereafter, at the office. In the preparation of this list she is advised to consult with the instructors or with the chairman of the Division or Department concerned. If a change in the list is subsequently made, written notice must be filed at the office.

A student who wishes to devote her time, largely or wholly, to special study of an advanced character may count a course embracing such study as equivalent to more than one course, up to a complete year's work, or may carry on such study outside and in place of the regular courses, under the direction and supervision of some specified instructor or instructors. In either case, the substitution proposed must have the approval or consent of the Instructor or Instructors concerned; and the permission of the Academic Board is required.

#### DEGREES.

The requirements for the degrees of Bachelor of Arts and Master of Arts are as follows:

In order to be recommended for the degree of Bachelor of Arts, a candidate must have passed in studies amounting to sixteen courses, together with such work in English as may be prescribed for her; making a total of seventeen or seventeen and a half courses, as the case may be. She must, moreover, have attained a grade above D in at least two-thirds of all the work done by her in Radcliffe College in satisfaction of the requirements for the degree, and in her Senior year must have passed in not less than four courses, with grades above D in at least two of them.

An undergraduate must take, in each academic year, at least four courses, in addition to such work in English as may be prescribed for her; and (including her prescribed English) she may take five, but not more, as regular courses to be counted towards the degree. Certain studies taken in the Harvard Summer School may also be counted towards the degree.

The ordinary requirement for the degree of Master of Arts for a graduate of a college of good standing consists of at least one year of residence and study devoted to advanced work approved by the Academic Board of Radcliffe College as affording suitable preparation for the degree and completed with high credit. Other persons will be admitted to the degree on conditions to be determined in each case.

The programme of study for the degree of Master of Arts must form a consistent plan of work pursued with some definite aim, though it need not lie wholly in one Department or field. This work may be done either in, or in connection with, the regular courses of instruction, or independently of them. In the latter case it must be carried on under the guidance of some specified instructor.

No student may count for the degree of Master of Arts courses which she has taken as an undergraduate.

All diplomas are countersigned by the President of Harvard University and bear the University seal.

#### TUITION FEES.

The annual tuition fee for a student doing full work is two hundred dollars, in addition to the special laboratory fees named below. It is payable, one hundred and twenty-five dollars on October 1, seventy-five dollars on February 1.

For those students who are permitted by the Academic Board to take less than four courses, two-thirds of the fee is payable on October 1, the remaining third on February 1. The charges are as follows:—

For any regular course, not a laboratory course or course of research, sixty dollars; for any half-course, not a laboratory course, thirty dollars; for a course of research or for a laboratory course, besides the special laboratory fees, a sum equal to the fee for one, two, or more courses, according to the number of courses to which the Academic Board shall consider it equivalent as part of the student's work for the year. But the minimum fee charged for any student is forty dollars, and the maximum fee, in addition to the special laboratory fees, is two hundred dollars, covering any number of courses that a student is permitted to take.

Students in laboratory courses pay in addition a special laboratory fee of five dollars for each course and of five dollars or two and a half dollars for each half-course.

No student will be admitted for any shorter time than a whole academic year, except by special vote of the Academic Board.

A student doing full work and therefore liable for the full tuition fee of two hundred dollars is entitled to a partial remission of fee in case of properly notified withdrawal from college or protracted absence, as follows: If she withdraws in the course of the academic year she is charged only to the end of the third in which she withdraws, provided that before that time she gives written notice of her withdrawal to the Dean; otherwise she is charged to the end of the third in which such written notice is given.

If she is absent with the consent of the Academic Board for three consecutive months she is entitled to a deduction of fifty dollars from the year's tuition fee; if she is absent for the whole year, not including the midyear and final examinations or either of them, she is entitled to a deduction of one hundred and fifty dollars provided she has given in either case previous notice of her intended absence to the Secretary.

In the case of students liable for less than the full fee of two hundred dollars no deduction is made for absence or withdrawal.

No student is entitled to a reduction of fee on account of withdrawal from a course or courses after the year has begun unless she withdraws from the college and then only if she has been doing full work.

No claim for deduction of fee will be considered if presented after the close of the Academic year in which the absence or withdrawal took place.

Elizabeth Cary Agassiz House, opened in 1905, contains, in addition to the theatre, a lunch room, living room, reading room, locker room and quiet rooms for the daily use of all the Radcliffe students. In 1905–06 a large part of the running expenses of Agassiz House was defrayed by voluntary contributions. The Council voted (on April 1, 1907) that each student registered in Radcliffe College in 1907–08 be required to pay \$5 for the use of Agassiz House. This amount will be charged on the first term bill.

No student is permitted to attend any college exercise after October 15th in any year unless all bills previously rendered for that year have been paid; and similarly no student is permitted to attend any College exercise after March 1st unless all bills previously rendered have been paid; and in no event is any degree conferred unless all dues to the College have been paid at least twenty-four hours before Commencement Day.

## THE CHARLES ELIOT NORTON FELLOWSHIP IN GREEK STUDIES.

In 1902, James Loeb, of the Class of 1888, gave securities valued at fourteen thousand one hundred dollars for the permanent establishment of this fellowship, which he had maintained during the year 1901-02, "in grateful recognition of the long and great friendship which Professor Norton has shown him since his boyhood, and in order to record in a fitting manner the eminent services which Professor Norton has rendered the cause of Archæology, and his beneficent prominence in the Archæological Institute of America and the American School of Classical Studies at Athens."

Competition for the fellowship is open to members of the Senior Class in Harvard College and of the Graduate School of Arts and Sciences of Harvard University, and to Seniors and Graduate Students in Radcliffe College. It has an annual income of six hundred dollars.

The award will be made by a committee appointed by the Department of the Classics, of which committee Professor Norton is to be a member during his life, on the basis (1) of a thesis on a subject approved by this committee, and (2) of such other evidence of scholarship as may be accessible. In the award, no account is to be taken of the financial means of the competitor; and no award will be made in case the these offered are not of sufficient merit.

The editors of the Harvard Studies in Classical Philology are to have the right to publish the thesis of the successful candidate.

The incumbent of the fellowship must agree to pursue his studies for the year of his incumbency at the American School of Classical Studies at Athens, and to devote himself to the study of some special subject approved by the committee, in the field of Greek History, Literature, Art, Archæology, Epigraphy, or Topography. He shall also agree to write and publish, at the end of the year of his fellowship, a monograph embodying the results of his investigations.

In accordance with the terms of the fellowship, the award will be made in the Spring of 1908, for the academic year 1908-09. The following subjects for theses are proposed by the Committee:—

- (1) The Ethics of Pindar.
- (2) Greek Oracles as a Source of Greek History.
- (3) The Influence of Democracy on the Character of Attic Oratory.
- (4) Plato's and Aristotle's Conception of the Art of Music in its Relation to Education and Life.

- (5) Funeral Rites in Greek Poetry and Art of the Fifth Century, with a Study of their Inner Significance.
- (6) The Evidence of the Intention of Pericles to Substitute Athena for Apollo as the National Divinity.

Candidates may, however, with the consent of the Committee, write on other classical subjects.

Applications for admission to candidacy must be made to the Chairman of the Department of the Classics not later than December 1, 1907; and the theses of approved candidates must be presented to the Chairman not later than March 1, 1908.

## ELIZABETH ALLEN PATON MEMORIAL FELLOWSHIP.

A Fellowship of \$100, established for the year 1905-06, has been continued for the year 1906-07 by Lucy Allen Paton, (A. B. 1892, Ph. D. 1902) in memory of her mother, Elizabeth Allen Paton. The conditions are as follows: It is to be awarded to a graduate student who has already begun some piece of advanced research in the departments of English or Modern Languages which she wishes to complete at Radcliffe, the fellowship to be awarded entirely without regard to her financial circumstances, and only as a recognition of her character and scholarship.

This Fellowship was awarded in 1905-06 to Muriel Bothwell Carr, (McGill University) A. B. 1898, A. M. 1900, (Radcliffe) A. M. 1902.

It was awarded in 1906-07 to Gertrude Schoepperle, (Wellesley) A. B., 1903, A. M. 1905.

## SCHOLARSHIPS.

Applications for scholarships should be addressed to the Dean of Radcliffe College, and should be in the hands of the Dean on or before the first of June, 1907.

#### THE EDWARD AUSTIN SCHOLARSHIPS.

In 1899, the sum of \$25,500 was received by Radeliffe College in settlement of the bequest of \$30,000, made by Edward Austin, the income

thereof to be paid to "needy, meritorious students and teachers, to assist them in payment of their studies."

In 1900 the heirs of Edward Austin gave \$2,250 to be added to this fund. For the year 1906-07 five scholarships were awarded from the income of this fund.

One scholarship of \$200 to Emma Bailey Harris (Wesleyan University) A. B. 1897, (Radcliffe) A. M. 1904.

One scholarship of \$200 to Violet Louise Holcomb (Colorado College)
A. B. 1906.

One scholarship of \$200 to Edith Gertrude Reeves (University of South Dakota) A. B. 1906.

One scholarship of \$200 to Blanche Evans Hazard, of the class of 1907. One scholarship of \$200 to Susanna King Mazyck, a Special Student.

## THE HARVARD ANNEX SCHOLARSHIP.

By gift of the Alumnae and students of the "Harvard Annex" and their friends, an annual scholarship has been established to be known as "The Harvard Annex Scholarship founded by Alumnae of Radcliffe College." The fund provides for the tuition fees of one student.

In 1906-07 this scholarship was awarded to Gertrude Schoepperle (Wellesley) A. B. 1903, A. M., 1905, graduate student (Radcliffe) 1905-06.

### THE ELLEN M. BARR SCHOLARSHIPS.

By the terms of the will of the late Ellen M. Barr, the residue of her estate, after the payment of debts and legacies, was bequeathed to Radcliffe College. Subject to the payment of an annuity, the income of this bequest is to be applied "in the form of annual scholarships of not less than two hundred and fifty dollars and not more than three hundred dollars each, for the benefit of students in Radcliffe College, who, in point of character, ability and physical constitution, give promise of future usefulness, and who stand in need of pecuniary assistance."

In 1906-07 five scholarships from this fund, of the value of \$250 each were awarded to Linnie May Marsh (*Whitman College*) A. B. 1905; Alcina Burrill Houghton, Margaret Elden Rich, and Jennie Ervine Woodward, of the class of 1907; and to Constance Emerson Burrage of the class of 1908.

## THE ELLA LOWELL LYMAN MEMORIAL SCHOLARSHIP.

By gift of Mr. Arthur T. Lyman of Boston, an annual scholarship has been established in memory of his wife, Ella Lowell Lyman. The fund provides for the tuition fees of one student.

In 1906-07 this scholarship was awarded to Mabel Collin Osborne of the class of 1907.

## THE ELIZABETH CARY AGASSIZ SCHOLARSHIP.

The Elizabeth Cary Agassiz Scholarship is a gift to Radcliffe College from various friends of Mrs. Agassiz, who wished that it should bear her name. The fund provides for the tuition fees of one student.

In 1906-07 the income from this scholarship was divided between Faye Adele Dame and Marion Renfrew both of the class of 1908.

## THE AGNES IRWIN SCHOLARSHIP.

By gift of six hundred and eighty former pupils of the first Dean of Radcliffe College, the Agnes Irwin Scholarship has been established. By the terms of the gift the student to have the benefit of this scholarship is to be appointed by Miss Agnes Irwin, and all details regarding it are to be arranged by her for the present and the future. The fund provides for the tuition fees of one student.

In 1906-07 this scholarship was awarded to Constance Huntington Hall of the class of 1907.

### THE WIDOW JOANNA HOAR SCHOLARSHIP.

The College has established the Widow Joanna Hoar Scholarship with funds contributed by an unknown friend in memory of the widow of Charles Hoar, Sheriff of Gloucester in England, who came to America with her children in 1638. In awarding this scholarship preference is to be given to natives of Concord, Mass., or to daughters of citizens of that place. The fund at present provides for the tuition fees of one student.

In 1906-07 this scholarship was awarded to Elizabeth Copley Singleton of the class of 1908.

## THE MARIA DENNY FAY MEMORIAL SCHOLARSHIP.

An annual scholarship of two hundred dollars (\$200) has been established which provides for the tuition fees of one student.

## THE JOSIAH M. FISKE MEMORIAL SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske, of New York City, an annual scholarship has been established in memory of her late husband, Josiah M. Fiske, who was once a resident of Cambridge. The fund provides for the tuition fees of one student.

In 1906-07 this scholarship was awarded to Blanche Evelyn Spring of the class of 1909.

### THE CANTABRIGIA SCHOLARSHIP.

The Cantabrigia Scholarship was founded in 1903 from a gift made by the Cantabrigia Club of Cambridge. The income provides for the tuition fees of one student, and will be awarded by preference to a resident of Cambridge.

In 1906-07 this scholarship was awarded to Dorothy Kendall of the class of 1907.

### THE ABBY W. MAY SCHOLARSHIP.

By the terms of the will of the late Sarah Wyman Whitman, of Boston, an annual scholarship of two hundred dollars (\$200) has been established in memory of Abby W. May. The fund provides for the tuition fees of one student.

In 1906-07 this scholarship was awarded to Florence Ellen Lahee of the class of 1908.

## THE MARY ELIOT PARKMAN SCHOLARSHIP.

By the terms of the will of the late Sarah Wyman Whitman, of Boston, an annual scholarship of two hundred dollars (\$200) has been established in memory of Mary Eliot Parkman. This fund provides for the tuition fees of one student.

In 1906-07 this scholarship was awarded to Fanny Haynes Harris of the class of 1910.

### THE JAMES A. WOOLSON SCHOLARSHIP.

By the terms of the will of the late James A. Woolson, of Cambridge, an annual scholarship of two hundred dollars (\$200) has been established which provides for the tuition fees of one student.

In 1906-07 this scholarship was awarded to Emma Frost of the class of 1909.

## PRIZES.

### THE SARGENT PRIZE.

This prize was first offered in 1886–87 by John Osborne Sargent of New York, of the class of 1830, and was endowed in his memory, in 1892, by his daughter, Georgiana W. Sargent. The prize is of one hundred dollars, and is offered for the best metrical translation of a lyric poem of Horace, to be selected each year by the Department of the Classics.

The selection for 1908 is the seventh Ode of the fourth Book.

Undergraduates of Harvard College and of Radcliffe College may compete for this prize. The prize may be withheld if no competitor appears to deserve it.

The versions must be neatly and legibly written or typewritten, upon letter paper of good quality, of the quarto size, with a margin of not less than one inch at the top, at the bottom, and on each side; and the sheets

must be securely stitched or riveted together. The title-page of each manuscript must bear an assumed name, with a statement of the writer's academic standing; and the writer must give in, with her manuscript, a sealed letter, containing her true name and superscribed with her assumed name.

The manuscript must be deposited with the Dean of Radcliffe College on or before the first day of May, 1908.

In 1890 the Sargent Prize was awarded to Helen Leah Reed, of the class of 1890.

In 1892 the Sargent Prize was awarded to Margaret Foster Herrick, a special student.

In 1901 the Sargent Prize was awarded to Norma Rose Waterbury, of the class of 1904.

## THE GEORGE B. SOHIER PRIZE.

This prize was founded by the late Waldo Higginson of Boston, of the Class of 1833 in Harvard College, in memory of his brother-in-law George Brimmer Sohier of the Class of 1852. The endowment is for "one prize of \$250 for the best thesis presented by a successful candidate for Honors in English or in Modern Literature. If no thesis is deemed worthy of a prize, no prize will be given." "The competitors may be either: — (1) undergraduates in Harvard College, (2) Harvard graduates who are resident at the University as students in the Graduate School, or (3) students in Radcliffe College."

In 1897 the Sohier Prize was awarded to Beulah Marie Dix, of the class of 1897. Subject: "Published Collections of English and Scottish Ballads, 1765–1802."

In 1904 the Sohier Prize was awarded to Frances Elizabeth Newell, of the class of 1904. Subject: "Geoffrey of Monmouth and the Sabrina Legend."

## THE CAROLINE I. WILBY PRIZE.

This prize was founded in 1897 in memory of Miss Caroline I. Wilby, by her friends and former pupils.

The fund, originally \$3,060, has been somewhat increased, and the income is to be given annually to a Radcliffe student as a prize "for the best original work in any department."

The Wilby Prize was given for the first time in 1899 to Kate O. Petersen, (Vassar) A. B. 1890, (Radcliffe) A. M. 1895, Radcliffe graduate student, 1895–97, for a thesis on the Sources of Chaucer's Nonne Prestes Tale, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1900 to Lucy Allen Paton, A. B., 1892, A. M. 1894, Ph. D. 1902, for a thesis on Morgain la Fée, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1904 to Belva Mary Herron (*University of Michigan*) B. L., 1899, Radcliffe graduate student 1903–04, for a paper on the Progress of Labor Organization Among Women, and to Caroline Strong, A. B., 1903, A. M. 1906, for a thesis on the Tail-Rhyme Strophe in English Poetry.

The Wilby Prize was given in 1905 to Eleanor Harris Rowland, A. B. 1903, A. M. 1904, Ph. D. 1905, for her Doctor's dissertation on the Aesthetics of the Repetition of Visual Space Forms.

The Wilby Prize was given in 1906 to Frances Hall Rousmaniere, (Wellesley) A. B. 1900, A. M. 1904, (Radcliffe) Ph. D. 1906, for a paper on Certainty and Attention.

The prize may be withheld if no thesis or original work is deemed worthy of it.

## PLACES OF EXAMINATIONS.

In September examinations will be held in Cambridge only.

The examinations in June will be held at the following places, if applications are received by June 10. Other places may be added to this list later.

#### CALIFORNIA.

Belmont, in the rooms of Belmont School. Los Angeles, in the rooms of the Harvard School.

## COLORADO.

Denver, in the rooms of the Denver High School (East Side), corner of Nineteenth and Stout Streets.

#### Connecticut.

Washington, in the rooms of the Gunnery School.

## DISTRICT OF COLUMBIA.

Washington, in the rooms of the Central High School.

#### Illinois.

Chicago, in the rooms of the Law School of Northwestern University, southeast corner of Dearborn and Lake Streets.

## INDIANA.

Indianapolis, in the rooms of the Shortridge High School.

## KENTUCKY.

Louisville, in the rooms of the Boy's High School, First Street.

## MAINE.

Gardiner, in the rooms of the Gardiner High School. Portland, in the rooms of the Portland High School.

#### Massachusetts.

Andover, in the rooms of Phillips Academy.
Cambridge, at 10 Garden Street.
Fall River, in the rooms of the B. M. C. Durfee High School.
Lowell, in the rooms of the Lowell High School.
Lynn, in the rooms of the Classical High School.

Milton, in the rooms of Milton Academy.

Mt. Hermon, in the rooms of Mount Hermon School.

Quincy, in the rooms of the Quincy High School.

Springfield, in the rooms of the Springfield High School.

Worcester, in the rooms of Worcester Academy.

#### MICHIGAN

Detroit, in the rooms of Detroit University School.

## MINNESOTA.

St. Paul, in the rooms of St. Paul Academy, corner Portland Avenue and Dale Street.

## MISSOURI.

Kansas City, in the rooms of the Central High School. St. Louis, in the rooms of Board of Education, 9th and Locust Streets.

#### Nebraska.

Omaha, in the rooms of the Omaha Public Library.

## NEW HAMPSHIRE.

Concord, in the rooms of St. Paul's School. Exeter, in the rooms of Phillips Exeter Academy.

## NEW JERSEY.

Morristown, in the rooms of the Morristown School.

#### NEW YORK.

Albany, in the rooms of the Albany Academy.

Buffalo, in the rooms of the Buffalo Central High School, corner of Court and Franklin Streets.

Garden City, in the rooms of St. Paul's Cathedral School.

New York, at a place to be announced later.

## Оню.

Cincinnati, in the rooms of the Young Men's Christian Association. Cleveland, in the rooms of the Central High School.

Youngstown, in the rooms of Rayen School.

#### OREGON.

Portland, in the lecture-room of the Portland Library.

#### PENNSYLVANIA.

Philadelphia, in the rooms of the Young Men's Christian Association 15th and Chestnut Streets.

Pittsburg, in the rooms of Shady Side Academy. Scranton, in the rooms of the School of the Lackawanna.

RHODE ISLAND.

Providence, in the rooms of the Hope Street High School.

WASHINGTON.

Seattle in the rooms of the Central School, No. 15.

WISCONSIN.

Milwaukee, in the rooms of the East Division High School.

HAWAII.

Honolulu, in the rooms of Oahu College.

ENGLAND.

London.

GERMANY.

Bonn, at the Hotel Royal.

## COLLEGE ENTRANCE EXAMINATION BOARD.

In June, 1907, certain papers of the College Entrance Examination Board may be substituted for certain papers set for the separate admission examinations held by Harvard University. For more particular information apply to the Secretary of Radcliffe College.

The examinations of the Board will be held June 17–22, 1907. Applications to attend the Board's examinations must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, N. Y., and must be made upon a blank form to be obtained from the Secretary of the Board upon application.

Applications for examination at points in the United States east of the Mississippi River (also at Minneapolis, St. Louis, and other points on the Mississippi River) must be received by the Secretary of the Board on or before Monday, June 3, 1907; applications for examination elsewhere in the United States or in Canada must be received on or before Monday, May 27, 1907; and applications for examination at points outside the United States and Canada must be received on or before Monday, May 13, 1907. Applications received later than the dates named will be accepted when it is possible to arrange for the examinations of the candidates concerned, but only upon the payment of \$5.00 in addition to the regular examination fee.

The examination fee is \$5.00 for all candidates examined at points in the United States and Canada, and \$15.00 for all candidates examined at points outside of the United States and Canada. The fee (which cannot be accepted in advance of the application) should be remitted by postal order, express order, or draft on New York, to the order of the College Entrance Examination Board.

A list of the places at which examinations are to be held by the Board in 1907 will be published about March 1. Requests that the examinations be held at particular points, to receive proper consideration, should be transmitted to the Secretary of the Board not later than February 1.



### RADCLIFFE COLLEGE.

## ORDER OF EXAMINATIONS. (June and September.)

Monday, June 22 and September 21.

- 8-9 A. M. All candidates meet at 10 Garden Street the officer in charge of the examinations.
  - 9-10. Elementary Physics. 2-4. Geometry.
- $10\frac{1}{4}$ - $11\frac{1}{4}$ . Chemistry.  $2-3\frac{1}{2}$ . Plane Geometry.
  - 11 $\frac{1}{2}$ -1. Elementary Algebra.  $3\frac{1}{2}$ - $4\frac{1}{2}$ . Solid Geometry.  $4\frac{3}{7}$ - $6\frac{1}{4}$ . Elementary French.

## Tuesday, June 23 and September 22.

- 8½-10½. Elementary English. 1¾-3¾. Elementary Latin.
- 8½-11½. English A. 4-6. Advanced Latin.
- 113-123. Geography or Physiography.

## Wednesday, June 24 and September 23.

- \* 8–9. Logarithms and Trigonometry.  $2-3\frac{1}{2}$ . Elementary German.
- $9\frac{1}{4}-10\frac{3}{4}$ . Elementary History.  $3\frac{3}{4}-5\frac{3}{4}$ . Elementary Greek.
  - 11-1. Advanced French.

## Thursday, June 25 and September 24.

- $8\frac{1}{2}-10\frac{1}{2}$ . Advanced German,  $1\frac{1}{2}-3\frac{1}{2}$ . Advanced Greek.
- 10 $\frac{3}{4}$ -12 $\frac{3}{4}$ . Advanced History.  $3\frac{3}{4}$ -4 $\frac{3}{4}$ . Advanced Algebra. 5-6. Anatomy.

## Friday, June 26, and September 25.

- 9–10½. Harmony. 2–3. Astronomy.
- 11-1. Counterpoint.

Saturday, June 27 and September 26.

2-3. Meteorology.

## LABORATORY EXAMINATIONS.

In June, classes from schools near Cambridge take the laboratory examinations in Physics and Chemistry on earlier days.

## SEPTEMBER EXAMINATIONS.

The September Examinations will be held in Cambridge only, on Monday, Tuesday, Wednesday, Thursday, Friday and Saturday, September 21, 22, 23, 24, 25 and 26.

## EXAMINATIONS IN FRENCH A, AND GERMAN A.

The examinations in French A and German A correspond to the admission examinations in Elementary French and German, and will be held on Monday, June 22, and Monday, September 21, and on Wednesday, June 24 and Wednesday, September 23, respectively.

## COLLEGE ENTRANCE EXAMINATION BOARD.

In June, 1908, papers of the College Entrance Examination Board may be substituted for corresponding papers set for the separate admission examinations held by Harvard University but no candidate may offer both Harvard and Board examinations in the same subjects. For more particular information apply to the Secretary of Radcliffe College.

The examinations of the Board will be held June 15–20, 1908. Applications to attend the Board's examinations must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, N. Y., and must be made upon a blank form to be obtained from the Secretary of the Board upon application.

Applications for examination at points in the United States east of the Mississippi River (also at Minneapolis, St. Louis, and other points on the Mississippi River) must be received by the Secretary of the Board on or before Monday, June 1, 1908; applications for examination elsewhere in the United States or in Canada must be received on or before Monday, May 25, 1908; and applications for examination at points outside the United States and Canada must be received on or before Monday, May 11, 1908. Applications received later than the dates named will be accepted when it is possible to arrange for the examinations of the candidates concerned, but only upon the payment of \$5.00 in addition to the regular examination fee.

The examination fee is \$5.00 for all candidates examined at points in the United States and Canada, and \$15.00 for all candidates examined at points outside of the United States and Canada. The fee (which cannot be accepted in advance of the application) should be remitted by postal order, express order, or draft on New York, to the order of the College Entrance Examination Board.

A list of the places at which examinations are to be held by the Board in 1908 may be obtained by addressing the Secretary of the Board, Professor N. G. McCrea, P. O. Sub-Station 84, New York, N. Y.

## RADCLIFFE COLLEGE.

## ORDER OF EXAMINATIONS. (June and September.)

Monday, June 24 and September 16.

- 8-9 A. M. All candidates meet at 10 Garden Street the officer in charge of the examinations.
  - 9-10. Elementary Physics. 2-4. Geometry.
- 101-111. Chemistry. 2-31 Plane Geometry.
  - 11½-1. Elementary Algebra. 3½-4½. Solid Geometry. 4½-0½. Elementary French.

Tuesday, June 25 and September 17.

- $8\frac{1}{2}-10\frac{1}{2}$ . Elementary English.  $1\frac{3}{4}-3\frac{3}{4}$ . Elementary Greek.
- 103-123. Elementary Latin. 4-6. Advanced Latin.

Wednesday, June 26 and September 18.

- 8-9. Logarithms and Trigonometry 2-3½. Elementary German.
- $9\frac{1}{4}-10\frac{3}{4}$ . Elementary History.  $3\frac{3}{4}-5\frac{3}{4}$ . Advanced Greek.
  - 11-1. Advanced French.

Thursday, June 27 and September 19.

- $8\frac{1}{2}-10\frac{1}{2}$ . Advanced German.  $1\frac{1}{2}-2\frac{1}{2}$ . Advanced Algebra.
- 10 $\frac{3}{4}$ -12 $\frac{3}{4}$ . Advanced History.  $\sqrt{23}$ -5 $\frac{3}{4}$ . English A.

Friday, June 28 and September 20.

- 9-101. Harmony.
- 2-3. Geography or Physiography.

11-1. Counterpoint.

Saturday, June 29 and September 21.

- 8-9. Astronomy. 10½-11½. Meteorology.
- 9½–10½. Anatomy, Physiology, and  $11\frac{3}{4}$ – $12\frac{3}{4}$ . Advanced Physics. Hygiene.

### LABORATORY EXAMINATIONS.

In June, classes from schools near Cambridge take the laboratory examinations in Physics and Chemistry on earlier days.

## SEPTEMBER EXAMINATIONS.

The September Examinations will be held in Cambridge only, on Monday, Tuesday, Wednesday, Thursday, Friday and Saturday, September 16, 17, 18, 19, 20, and 21.

## Examinations in French A, and German A.

The examinations in French A and German A correspond to the admission examinations in Elementary French and German, and will be held on Monday, June 24, and Monday, September 16, and on Wednesday, June 26, and Wednesday, September 18, respectively.

Monographs prepared by the students are published and sold by Messrs. Ginn & Company.

Besides the present publication, Radcliffe College issues annually a list of its Courses of Study and an Annual Report. These documents, and also separate pamphlets, published by Harvard University giving detailed accounts of the work of the principal departments, may be had by addressing

Radcliffe College,

Cambridge, Massachusetts.

GcM DB

> THE LIBRARY OF THE UNIVERSITY OF ALLMOIS

# Madcliffe College

CAMBRIDGE, MASSACHUSETTS

1908

\*\*\* The legal title of the Corporation (to be used in making gifts and bequests) is "RADCLIFFE COLLEGE." It should be described as established in Cambridge, Massachusetts.

Correspondence should be addressed to Radcliffe College, Cambridge, Massachusetts.

The College buildings are open to visitors interested in the work of the College, both in vacations and in term-time; though students only are admitted to the class-rooms during the hours of lectures.

The Laboratories of Chemistry, Physics, and Botany are in buildings on the grounds.

The Laboratory of Biology occupies quarters in the University Museum in Oxford Street.

The Gymnasium is open to all students without charge.

The Dean and the Secretary may be consulted at Fay House during termtime, and special appointments may be made as required.

The Academic year begins on the Thursday following the last Wednesday in September. In 1908 it is October 1. Students report for registration at 9 A. M. of that day.

The summer vacation begins on the last Tuesday in June, and ends on the last Wednesday in September.

The Christmas recess is from December 23, 1908, to Jan. 2, 1909, inclusive.

The Spring recess is from April 18 to April 24, 1909, inclusive.

## Radcliffe College.

RADCLIFFE COLLEGE, the successor of the Society for the Collegiate Instruction of Women, offers systematic collegiate instruction to women under the professors and other teachers of Harvard University. More than a hundred instructors of the University are teachers in Radcliffe College.

Fay House, 10 Garden Street, contains the offices and several of the recitation rooms. The other recitation-rooms, the library, and the gymnasium are near Fay House. The College has four laboratories, of Physics, Chemistry, Botany, and Biology. The collections of the Museum of Comparative Zoölogy, the Peabody Museum of American Archaeology, the University Museums of Geology, Botany, and Mineralogy, the Semitic Museum, and the Germanic Museum are also open to the students; and, by vote of the President and Fellows of Harvard College, the students have the use of the University Library, containing 500,000 volumes. Opportunities for study in the Astronomical Observatory, the Botanic Garden, and the Herbarium are also afforded.

The requirements for admission are identical with those for admission to Harvard College. The courses of instruction given in Radcliffe College correspond to both "Undergraduate" and "Graduate" courses offered by Harvard University, and are more than sufficient to enable a woman to perform the work required by the University for the degrees of A. B. and A. M. In addition to these, Graduate Students in Radcliffe College have access to a large number of Graduate courses in Harvard University. The examinations are the same in both institutions, and the diplomas conferring the degrees of A. B., A. M., and Ph. D. are countersigned by the President of Harvard University as a guarantee that these degrees are equivalent to the corresponding degrees given by the University.

For provisions for the admission of Special Students and Graduate Students, see pages 31, 32, 33, 34, 35, and 36.



## Associates of Radeliffe College.

EZRA HENRY BAKER, A. B.

MARY LOWELL BARTON.

ELIZABETH BRIGGS, A. M.

LE BARON RUSSELL BRIGGS, A. M., LL. D., LITT. D.

WILLIAM ELWOOD BYERLY, PH. D.

ELLA LYMAN CABOT.

FREDERICK PICKERING CABOT, A. M., LL. B.

MARY COES, A. M.

MARY HUNTINGTON COOKE.

LILIAN HORSFORD FARLOW.

FREDERICK PERRY FISH, A. B.

ARTHUR GILMAN, A. M.

STELLA SCOTT GILMAN.

GEORGE LINCOLN GOODALE, M. D., LL. D.

WILLIAM WATSON GOODWIN, Ph. D., LL. D., D. C. L.

JOHN CHIPMAN GRAY, LL. D.

CAROLINE LOUISE HUMPHREY, A. B.

AGNES IRWIN, LITT. D., LL. D.

VIRGINIA NEWHALL JOHNSON, A. B.

ALICE MARY LONGFELLOW.

ELLEN FRANCIS MASON.

FANNY PEABODY MASON.

JOHN FARWELL MOORS, A. M.

ESTHER HALLOWELL MORSE, A. B.

CHARLES ELIOT NORTON, LITT. D., LL. D.

FRANCES PARKMAN.

JOHN FORBES PERKINS, A. B., LL. B.

JAMES HARDY ROPES, A. B., D. D.

CLEMENT LAWRENCE SMITH, A. M., LL. D.

EZRA RIPLEY THAYER, A. M., LL. B.

JOSEPH BANGS WARNER, A. M., LL. B.

SARAH YERXA, A. B.

President

LEBARON RUSSELL BRIGGS

Dean

AGNES IRWIN

Treasurer

EZRA HENRY BAKER

Council

LEBARON RUSSELL BRIGGS, Chairman

AGNES IRWIN

EZRA HENRY BAKER

WILLIAM ELWOOD BYERLY

EZRA RIPLEY THAYER
JOHN FARWELL MOORS

FRANCES PARKMAN

WILLIAM WATSON GOODWIN ELLA LYMAN CABOT FREDERICK PICKERING CABOT

MARY COES

Academic Board

WILLIAM ELWOOD BYERLY, Chairman LEBARON RUSSELL BRIGGS

Agnes Irwin

Edward Laurens Mark Horatio Stevens White John Henry Wright

BENJAMIN OSGOOD PEIRCE

DANK WHALAM TAR

FRANK WILLIAM TAUSSIG ALBERT ANDREW HOWARD GEORGE LYMAN KITTREDGE CHARLES HALL GRANDGENT

Secretary

MARY COES

Xibrarian

CAROLINE FARLEY

Mistress of Bertram Hall

ELIZA MASON HOPPIN

Mistress of Grace Popkinson Eliot Hall

GRACE ELIZABETH MACHADO

Director of the Gymnasium

ELIZABETH AGNES WRIGHT

## Standing Committees.

The House Committee in charge of buildings, house-service, grounds, and repairs and additions, MISS IRWIN, Chairman, Mr. Briggs (ex officio), Mr. Warner, Mr. Baker.

The Students' Committee in charge of the general discipline of the students, oversight of their homes while in Cambridge and of their amusements, clubs, and social life, Miss IRWIN, Chairman, Mrs. Cooke, Miss Coes, Mrs. Cabot, Mrs. Parkman.

The Library Committee with general supervision of the Library, Mr. Goodwin, Chairman, Mr. Briggs (ex-officio), Miss Irwin, Miss Farley, Mrs. Farlow, Miss E. F. Mason.

The Finance Committee in charge of all matters pertaining to Expenditure, Endowment Fund, etc., Mr. Moors, Chairman, Mr. Baker, Mr. Fish, Mr. Gilman.

The Committee on the Gymnasium, Mrs. Farlow, Miss Irwin, Miss Longfellow.

The Committee on the Halls of Residence, Miss Irwin, Chairman, Miss Humphrey, Mrs. Barton, Miss Hopkinson, Mrs. Parkman, Miss Yerxa.

For the information of school officers and others, the College keeps a list of those students who have received degrees or certificates and wish to find positions as teachers.



## REQUIREMENTS FOR ADMISSION TO RADCLIFFE COLLEGE.

## ADMISSION OF CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS.

The requirements for admission to Radcliffe College are the same as those for admission to Harvard College. Radcliffe College holds no independent entrance examinations, but is authorized to make arrangements by which women may take the Harvard Examinations and have their work submitted to the Harvard Examiners. These examinations may be taken in Cambridge, and in other places in which the Harvard examinations are held in June. The September examinations are held in Cambridge only.\*

Two examinations of candidates for admission will be held in Cambridge in 1908, in Fay House. The days and hours are given in detail on page forty-nine of this pamphlet.

The academic year begins on Thursday, October 1, 1908. All Students register at the Office on that day at nine A. M.

Any one expecting to take admission examinations should register for such examinations on a form which may be obtained from the Secretary. When writing for this form she should say whether she is a Preliminary or a Final Candidate. The Registration Blanks of all candidates who wish to take examinations in June should be properly filled and in the hands of the Secretary by June 10; those of candidates who wish to take examinations in September, by September 10.

Every candidate for admission to Radeliffe College is required to furnish a certificate of honorable dismissal from the school or college which she has attended, or from the tutor with whom she has studied. She must

A fee of five dollars is to be paid by each candidate as often as she applies for examination. For this a receipt will be given, and the amount will be deducted from the first payment for tuition. The fee will not be returned to a candidate who does not enter college.

<sup>\*</sup> For the examinations of the College Entrance Examination Board see page 50.

also refer to two persons from whom information about her may be obtained. References should be sent to the Secretary of the college a month before the examination.

## TERMS OF ADMISSION TO RADCLIFFE COLLEGE.

The studies which may be presented in satisfaction of the requirements for admission by Candidates for the degree of A. B. are named together in the following lists. The figure attached to each study indicates the relative weight which will be given to that study in determining the question of the candidate's fitness for admission:

Elementary	Advanced			
English (4) Greek (4) Latin (4) German (2) French (2)	Greek (2) Latin (2) German (2) French (2)			
History $\{\mathcal{Z}\}$ $\{$ One of the following two: Greek and Roman English and American	History   One of the following five: Ancient   English and American   English   American   of Europe			
Harmony (2)	Counterpoint (2)			
Algebra (2) Geometry (3) or Plane Geometry (2)	Algebra (1) Logarithms and Trigonometry (1) Solid Geometry (1) Astronomy (1)			
Physics (2) Chemistry (2) Geography (1) or Physiography (1)	Meteorology (1)			

Anatomy, etc. (1)

A candidate for admission must offer from this list studies amounting to 26 points, of which points at least four must be in advanced studies. The studies offered must include:—

English							4	
One ancient	language	(Eler	n. La	tin c	r Ele	m.		
Greek)							4	
One modern foreign language (Elem. German								
or Elem. I	French)						2	
Elementary	History						2	
Algebra							2	
Geometry or	Plane G	eometi	ry				3 or 2	
Studies amounting to two points from the fol-								
lowing sci	iences (E	lem.	Physi	ics, (	Chemi	istry,		
Geography	or F	hysiog	graph	y,	Anat	omy,		
Physiology	y, and H	ygien	е				2	
						1	0 or 18	

No candidate may offer an Advanced study who does not at the same time or earlier offer the corresponding Elementary study; but Physics is considered Elementary with respect to Meteorology, and Geometry or Plane Geometry, with respect to Astronomy.

Candidates who are looking forward to the extended study of English or of any other modern literature are advised to acquire a knowledge of Greek as well as of Latin.

For terms of admission to advanced standing, see pages 30 and 31.

## DEFINITIONS OF REQUIREMENTS.

GOOD ENGLISH.

Clear and idiomatic English is expected in all examination papers and note-books written by candidates for admission. Teachers are requested to insist on good English, not only in translations, but in every exercise in which the pupil has occasion to write or to speak English.

## 1. English.

A candidate for admission to Radcliffe College may take either of the examinations described below. If she passes English A she is exempt from the prescribed English of the Freshman year (English A); but if she passes it with Grade D she is required to take before the end of her second

year a half-course in English Composition in addition to her regular elective courses. Furthermore, on the evidence of her examination book she may be credited with an ungraded mark of "pass in Elementary English," but required to take the prescribed English of the Freshman year.

Candidates who do not intend to anticipate the required English of the Freshman year are advised not to take the examination in Elementary

English until the year in which they are to enter College.

## Elementary English.

The examination is intended to test (1) the candidate's ability to write clearly and effectively, and (2) her ability to read literature with accuracy, intelligence, and appreciation.

- (1) For the former purpose all the answers on the examination will be considered; and the candidate will be asked to write on one or more of a number of topics drawn from the literature studied in preparation for the examination, from her other studies, and from her own experience. The examiners will take into account the candidate's spelling, punctuation, use of capital letters, grammatical accuracy, use of words, structure of sentences, paragraphs, and whole compositions, and in general the quality of her English.
- (2) For the latter purpose two lists of books are provided, drawn from those prescribed by the Conference on Uniform Entrance Requirements in English, (a) books for reading and practice, and (b) books for study and practice. The books for reading and practice the candidate should read as she reads other books: she is expected to be generally familiar with their contents rather than to know them minutely. The books for study and practice should be thoroughly mastered, so that the candidate can answer questions on the subject matter, form, and structure, and can explain allusions and the meaning of unusual words. In connection with the reading and study of the prescribed books the candidate is advised to gain some acquaintance with the periods of literary history to which these books belong, and to commit to memory a considerable amount of English poetry.

The books for reading in 1908 are:

Shakspere's Macbeth and Merchant of Venice; The Sir Roger de Coverley Papers in the Spectator; Irving's Life of Goldsmith; Coleridge's Ancient Mariner; Scott's Ivanhoe and Lady of the Lake; Tennyson's

Gareth and Lynette, Lancelot and Elaine, and Passing of Arthur; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

The books for study in 1908 are:-

Shakspere's Julius Caesar; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America; Macaulay's Essay on Addison, and Life of Johnson.

The books for reading in 1909 are: -

Group I (two to be selected).

Shakspere's As You Like It, Henry V, Julius Caesar, Merchant of Venice, Twelfth Night.

Group II (one to be selected).

Bacon's Essays; Bunyan's The Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers in the Spectator; Franklin's Autobiography. Group III (one to be selected).

Chaucer's Prologue; Spenser's Faerie Queene (selections); Pope's Rape of the Lock; Goldsmith's Deserted Village; Palgrave's Golden Treasury (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, and Burns.

Group IV (two to be selected).

Goldsmith's Vicar of Wakefield; Scott's Ivanhoe; Scott's Quentin Durward; Hawthorne's House of the Seven Gables; Thackeray's Henry Esmond; Mrs. Gaskell's Cranford; Dickens's Tale of Two Cities; George Eliot's Silas Marner; Blackmore's Lorna Doone.

Group V (two to be selected).

Irving's Sketch Book; Lamb's Essays of Elia; De Quincey's Joan of Arc and The English Mail Coach; Carlyle's Heroes and Hero Worship; Emerson's Essays (selected); Ruskin's Sesame and Lilies.

Group VI (two to be selected).

Coleridge's Ancient Mariner; Scott's Lady of the Lake; Byron's Mazeppa and the Prisoner of Chillon; Palgrave's Golden Treasury (First Series), Book IV, with especial attention to Wordsworth, Keats, and Shelley; Macaulay's Lays of Ancient Rome; Poe's Poems; Lowell's Vision of Sir Launfal; Arnold's Sohrab and Rustum; Longfellow's Courtship of Miles Standish; Tennyson's Gareth and Lynette, Lancelot and Elaine, and Passing of Arthur; Browning's Cavalier Tunes, Lost Leader, How They Brought the Good News from Ghent to Aix, Evelyn Hope, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, Boy and the Angel, One Word More, Hervé Riel, Pheidippides.

The books for study in 1909 are:-

Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America, or Washington's Farewell Address and Webster's First Bunker Hill Oration; Macaulay's Life of Johnson, or Carlyle's Essay on Burns.

The books for reading in 1910 are:

Shakspere's Merchant of Venice and Julius Caesar; the Sir Roger de Coverley Papers in the Spectator; Franklin's Autobiography; Macaulay's Lays of Ancient Rome; Scott's Ivanhoe and Lady of the Lake; Tennyson's Gareth and Lynette, Lancelot and Elaine, and Passing of Arthur; Hawthorne's House of the Seven Gables; Dickens's Tale of Two Cities.

The books for study in 1910 are:

Shakspere's Macbeth; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America, or Macaulay's Life of Johnson.

## English A.

The examination will be adapted to the proficiency of those who have studied English composition and literature in a systematic course of three school hours or periods a week for four years. The corresponding course in Harvard College aims to give thorough training in English composition, and to prepare students to write expositions, arguments, and narratives of 1500–2000 words. The examination will include, therefore, besides questions on rhetoric and on literary history from the time of Shakspere, a composition to which not less than two hours will be allotted on some topic out of a list drawn from English literature, from other studies, and from the candidate's own experience. In this composition the candidate will be expected to show, besides accuracy in spelling, punctuation, grammar, and the use of words, some skill in the use of sentences, clear and firm paragraphing, and command of the principles of structure.

## 2, 3. Greek.

## 2. Elementary Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least two school years. The two parts of the examination cannot be taken separately:—

(a) The translation at sight of simple Attic prose. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) A thorough examination on a prescribed portion of Xenophon (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Attic prose, involving the use of such words, constructions, and idioms only as occur in the portion of Xenophon prescribed.

The portion of Xenophon prescribed for this examination is the first book of the Anabasis, chapters i-viii. Two years' notice will be given of any change in the selection.

#### 3. Advanced Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises, a week, extending through at least three school years. The second part of the examination (Greek Composition) is optional, but candidates are advised to try this part of the paper, since a fair translation will offset deficiencies in the preceding part.

(a) The translation at sight of Attic prose and of Homer, with questions designed to test the candidate's understanding of the passages set, and questions on ordinary forms, constructions, and idioms, and on prosody. There will also be questions on the Homeric poems and Homeric life. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into Attic prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Greek prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the elementary and advanced examinations in Greek is based on the assumption that the candidate has begun the study of Latin at least a year earlier, and has continued it along with her Greek course; otherwise the periods specified would not be sufficient.

<sup>\*</sup> The pages of the more recent Teubner text editions are taken as a standard in this statement.

In preparation for the elementary examination in Greek, candidates should read from 130 to 170 pages \* of Attic prose. For the advanced examination candidates should read from 30 to 50 pages more of Attic prose, and from 3000 to 5000 verses of Homer. The reading of Homer may be advantageously begun with a thorough study of Iliad, Books I and II (to the catalogue of ships).

The pupil should be constantly guided in proper methods of reading, and trained to read the Greek intelligently, as Greek, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Greek, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Greek Composition, pupils should be trained, from an early stage of the preparatory course, to render into Greek, not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

## 4, 5. Latin.

## 4. Elementary Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *three* school years. The passages set for translation must be rendered into simple and idiomatic English. The three parts of the examination cannot be taken separately:—

- (a) The translation at sight of simple Latin prose.
- (b) An examination (which may include translation) on the first four books of Virgil's Aeneid, or on selected myths from Ovid's Metamorphoses, or on selected speeches of Cicero, with questions on the subject-matter and on literary and historical allusions. Two years' notice will be given of any change in these alternative requirements.
- (c) An examination directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose.

<sup>\*</sup> The pages of the more recent Teubner text editions are taken as a standard in this statement.

## 5. Advanced Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *four* school years. The passages set for translation must be rendered into simple and idiomatic English. The two parts of the examination cannot be taken separately:—

(a) The translation at sight of Latin prose and verse, with questions on

ordinary forms, constructions, and idioms, and on prosody.

(b) The translation into Latin prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the examinations in Latin is made with reference to schools which have a four years' course. Schools which have a five years' course may more advantageously provide for beginning the study of Latin in the first year, with some diminution, if necessary, of the time devoted to it in the last years of the course.

The course of reading pursued in preparation for the examinations in Latin should include: —  $\,$ 

(a) Easy reading, included in or following a suitable introductory book ('Latin Lessons'), amounting to from 30 to 40 pages; \*

(b) Nepos (Lives) and Caesar (Gallic War), 90 to 120 pages;

(c) Cicero, 90 to 120 pages, including the speech on the Manilian Law, the four speeches against Catiline, the Defence of Archias, and the Defence of Marcellus, with additional speeches selected by the teacher;

(d) Virgil and Ovid, 6000 to 10,000 verses, including the first six books of the Aeneid.

Preparation for the elementary examination alone should include (a) and (b), about 40 pages of Cicero, and either the first four books of Virgil's Aeneid, or the Speeches of Cicero on the Manilian Law, Catiline, Archias, and Marcellus, or the following myths from Ovid's Metamorphoses: Deucalion, Daphne, Phaethon, Cadmus, Pyramus, Andromeda, Proserpina, Niobe, Medea, Meleager, Philemon, Atalanta, Midas, Alcyone, Galatea.

The pupil should be constantly guided in proper methods of reading, and trained to read the Latin intelligently, as Latin, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Latin, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the advanced examinations in Latin Composition, pupils should be trained, from an early stage of the preparatory course, to render into Latin not merely detached sentences, illustrative of constructions, but also passages of conected narrative or description, prepared by the teacher on the basis of the prose authors read.

## 6, 7. German.

## 6. Elementary German.

- (a) The translation at sight of simple German prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of simple English sentences, or of easy connected prose, to test the candidate's familiarity with elementary grammar.

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than two hundred pages of easy German (including reading at sight in class).

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugation of the weak and the more usual strong verbs; the declension of articles, adjectives, pronouns, and such nouns as are readily classified; the commoner prepositions; the simpler uses of the modal auxiliaries; the elements of syntax, especially the rules governing the order of words.

Pronunciation should be carefully taught, and the pupils should have frequent opportunities to hear German spoken or read aloud. The writing of German from dictation is recommended as a useful exercise.

## 7. Advanced German.

(a) The translation at sight of ordinary German. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into German of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of those who have read, in addition to the amount specified under Elementary German, not less than five hundred pages of classical and contemporary prose and verse. It is recommended that the reading be selected from such works as the following: Riehl, Culturgeschichtliche Novellen; Freytag, Bilder aus der deutschen Vergangenheit, Die Journalisten; Kohlrausch, Das Jahr 1813; Schiller, Der dreissigjährige Krieg, Wilhelm Tell, Maria Stuart, Die Jungfrau von Orleans; Goethe, Hermann und Dorothea, Egmont, Iphigenie; Lessing, Minna von Barnhelm. About one half of the amount read should be Nineteenth Century prose.

In the translation into German candidates will be expected to show a thorough knowledge of accidence, the elements of word-formation, the principal uses of prepositions and conjunctions and the essentials of syntax, especially the uses of the modal auxiliaries, and of the subjunctive and infinitive modes.

It is recommended that the candidate be trained to follow a recitation conducted in German and to answer in that language questions asked by the instructor.

## 8, 9. French.

## 8. Elementary French.

- (a) The translation at sight of ordinary Nineteenth Century prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of simple English sentences or of easy connected prose, to test the candidate's familiarity with elementary grammar. Proficiency in grammar may also be tested by direct questions, based on the passages set for translation under (a).

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than four hundred pages (including reading at sight in class) from the works of at least three different authors. It is desirable that a portion of the reading should be from works other than works of fiction.

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugations of regular verbs, of the more frequent irregular verbs, such as aller, envoyer, tenir, pouvoir, voir, vouloir, dire, savoir, faire, and those belonging to the classes represented by ouvrir, dormir, connaître, conduire, and craindre; the forms and positions of personal pronouns and of possessive, demonstrative, and interrogative adjectives; the inflection of nouns and adjectives for gender and number, except rare cases; the uses of articles, and the partitive constructions.

Pronunciation should be carefully taught, and pupils should have frequent opportunites to hear French spoken or read aloud. The writing of French from dictation is recommended as a useful exercise.

#### 9. Advanced French.

(a) The translation at sight of standard French. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into French of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in

grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of candidates who have read, in addition to the amount specified under Elementary French, not less than six hundred pages of prose and verse from the writings of at least four standard authors. A considerable part of the amount read should be carefully translated into idiomatic English.

Candidates will be expected to show a thorough knowledge of accidence and familiarity with the essentials of French syntax, especially the uses of tenses, modes, prepositions, and conjunctions.

It is recommended that the candidate be trained to follow a recitation conducted in French and to answer in that language questions asked by the instructor.

## 10, 11. History (including Historical Geography).

## 10. Elementary History.

Either of the two following groups, each including two fields of historical study: —

- 1. Greek and Roman History.— (a) Greek History to the death of Alexander, with due reference to Greek life, literature, and art. (b) Roman History to the accession of Commodus, with due reference to literature and government.
- 2. English and American History.—(a) English History, with due reference to social and political development. (b) American History, with the elements of Civil Government.

For preparation in each of the two historical fields presented, a course of study equivalent to at least three lessons a week for one year will be necessary.

The candidate will be expected to show on examination such general knowledge of each field as may be acquired from the study of an accurate text-book of not less than 300 pages, supplemented by suitable parallel readings amounting to not less than 500 pages. The examination will call

for comparison of historical characters, periods, and events, and in general for the exercise of judgment as well as of memory. Geographical knowledge will be tested by means of an outline map.

In the judgment of the Department of History it is desirable that Greek and Roman History be offered as a part of the preparation of every candidate.

# 11. Advanced History.

Any one of the three courses of study which follow: -

- 1. Greek History to the destruction of Corinth and Roman History to the death of Constantine (open to those candidates only who have offered English and American History as an elementary study).
- 2. English History and American History (open to those candidates only who have offered Greek and Roman History as an elementary study).
- 3. European History from the Germanic conquests to the beginning of the Seventeenth Century.

In 1908 papers will be set in English and American History taken together and in English and in American History separately. After 1908 the paper in English and American History will be withdrawn. Candidates may obtain credit for Advanced History (2 points) by passing any one of these three examinations, if they take or have taken Elementary Greek and Roman History.

In every case the candidate will be expected to show on examination such an acquaintance with the whole field as may be gained from the study of good text-books, together with substantial parallel readings, and, further, such a detailed knowledge of some part of the field as may be gained from suitable topical study. A higher standard of acquirement and of power to combine results will be expected than in the elementary requirement.

As further evidence of the candidate's proficiency satisfactory written work, done at school and certified by the teacher, must be submitted at the time of the examination. It must be presented in the form of a notebook (or bound collection of notes), containing not less than 50 written pages on each historical field offered, and must show practice in some of the following exercises:—

- (a) Notes and digests of the pupil's reading outside of the text-books.
- (b) Brief written tests requiring the application to new questions of knowledge previously acquired.
  - (c) Parallels between historical characters or periods.
- (d) Short studies of topics limited in scope, prepared outside of the classroom and illustrated by some reference to contemporary material.

(e) Historical maps or charts showing explorations, migrations, conquests, territorial changes, or social conditions.

# 12, 13. Music.

# 12. Harmony.

The examination will be adapted to the proficiency of those who have studied Harmony in a systematic course of three lessons a week through one school year, who are proficient in pianoforte playing, and who have the ability to read chorals and moderately easy piano pieces at sight.

The examination will test

- I. The accuracy of the candidate's knowledge of the following points:
- a. Notation; Clefs; Signatures; Diatonic and Chromatic Intervals and their inversions; Consonance and Dissonance; Major and Minor diatonic scales; Chromatic Scale; Natural Harmonic Series.
  - b. Triads of the Major and Minor modes.
  - c. Rules of Chord-connection; Range of voices; Open and Close harmony; Tonality.
  - d. Inversions of Triads; Principles of doubling voices in chords, especially in successive Sixth-chords.
  - e. Chords of the Dominant Seventh, and Diminished Seventh; Preparation and Resolution.
    - f. Secondary Seventh-chords.
    - g. Principles of key-relationship; Simple modulation.
  - II. Her analytical knowledge of ninth chords, altered chords (including augmented chords), non-harmonic tones, suspensions, and pedal point. (Students should be encouraged to apply this knowledge in their harmonization).

Preparation for this examination should consist of systematic practice in the harmonization of simple melodies in soprano and in bass. All exercises should be written in a clear and well-formed notation. *Modern Harmony*, by Foote and Spalding, is used in the College Course corresponding to this requirement, and is recommended for use in preparation for the examination.

# 13. Counterpoint.

The examination will be adapted to the proficiency of those who have

studied Counterpoint in a systematic course of three lessons a week through one school year, and presupposes training in pianoforte playing. As counterpoint applies the principles of harmony to the melodious treatment of the several voice-parts in combination, and as the art of musical composition begins properly with this study, the work should consist principally of written exercises on given themes, in the following order:—Chorals and melodies harmonized, with a free use of passing notes; the several orders of Counterpoint in two. three, and four voices, with and without cantus firmus; Double Counterpoint; Free Imitative Counterpoint; Analysis of the Two-part Inventions and Fugues of Sebastian Bach; Simple forms of free composition, Organ Preludes, Two-part inventions, and Part Songs.

Students should use as models simple organ compositions and part-songs of modern composers. For the exercises in counterpoint the alto and tenor clefs should be used.

#### 14, 17. Mathematics.

A thorough practical acquaintance with ordinary Arithmetic is assumed as underlying all preparation in Mathematics. Knowledge of the fundamental principles of Arithmetic and careful training in accurate computation with whole numbers and with vulgar and decimal fractions form an essential part of early school work. But the pupil's time should not be wasted in the solution by arithmetic of puzzling problems which properly belong to algebra, or in complicated and useless reductions, or in the details of commercial arithmetic. It is desirable that some familiarity with algebraic expressions and symbols, including the methods of solving simple equations, be acquired in connection with the course in Arithmetic.

# Elementary Mathematics.

14. Elementary Algebra.— Algebra, through Quadratic Equations. The requirement in Algebra includes the following subjects: factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem for positive integral powers of the binomial, and the extraction of roots; arithmetical and geometrical progressions; putting questions into equations and the reduction of equations; the ordinary methods of elimination and the solution of both numerical and literal equations of the first and

second degrees with one or more unknown quantities and of problems leading to such equations.

The student should cover carefully the whole ground here specified, and should acquire a thorough understanding not only of the practice, but of the reasons involved in the elementary algebraic rules; for example, in the rules of multiplication, of signs, and of exponents, in the rules for fractions, and in those relating to the reduction and solution of equations. She should train herself to practical skill by the solution of a large number of examples, and should learn to do her work with reasonable quickness, as well as with confidence, accuracy, and clearness. The solution of fairly complicated literal quadratics, the various methods of elimination for equations of the first two degrees, the putting of problems in a neat manner into equations, and the working of the various algebraic operations both for integral and fractional expressions may be mentioned as important subjects of attention. The student should be taught to arrange her work in a clear, orderly, and compact fashion.

The time supposed to be devoted to the systematic study of the requirement in Algebra is the equivalent of a course of three lessons a week through two school years.

15. Geometry.— Plane and Solid Geometry, including problems in mensuration of plane and solid figures, and original propositions in Plane Geometry.

Geometric education should begin in the kindergarten or primary school, where the child should acquire familiarity through the senses with simple geometric forms, by inspecting, drawing, modelling, and measuring them, and noting their more obvious relations. This study should be followed, in the grammar school, by systematic instruction in Concrete (or Observational) Geometry, of which geometric drawing should form a part. Such instruction should include the main facts of Plane and Solid Geometry, treated as matters of observation, and not as exercises in logical deduction, without however necessarily excluding the beginnings of deductive proof as soon as the pupil is ready for them. Concrete Geometry is believed to have important educational value, and to prepare an excellent foundation for the later study of Formal Geometry. It belongs, however, to the earlier stages of school work, and should not be postponed until the time that belongs to direct preparation for college.

In teaching Formal Geometry, stress should be laid from the outset on accuracy of statement and elegance of form, as well as on clear and strict reasoning. As soon as the pupil has begun to acquire the art of rigorous

demonstration, her work should cease to be merely receptive, she should be trained to devise constructions and demonstrations for herself, and this training should be carried through the whole of the work in Plane Geometry. Teachers are advised, in their selection of a text-book, to choose one having a clear tendency to call out the pupil's own powers of thought, prevent the formation of mechanical habits of study, and encourage the concentration of mind which it is a part of the discipline of mathematical study to foster. The subject of Geometry, not a particular treatise, is what the pupil should be set to learn; and its simpler methods and conceptions should be made a part of her habitual and instinctive thought. Lastly, the pupil should be stimulated to good work by interest in the study felt and exhibited by the teacher.

The requirement in Geometry embraces the following topics: the general properties of plane rectilinear figures; the circle and the measure of angles; similar polygons; areas; regular polygons, and the measure of the circle; the relations of planes and lines in space; the properties and measure of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle. The propositions required under these several heads are those only which are contained in the older treatises, and which are recognized as constituting the Elements of Geometry. The examination does not include the additions introduced into some recent text-books, although most of those additions are in themselves valuable for the student who has time and taste for extra study in this field. A syllabus of the required propositions has been prepared. [This syllabus may be obtained, price 10 cents, at the Publication Office, 2 University Hall, Cambridge.]

The examination in Geometry also includes original propositions in Plane Geometry, based on the propositions named in the syllabus, and problems in mensuration in both Plane and Solid Geometry; but excellence in bookwork and in exercises immediately illustrating bookwork will be allowed to offset in part any lack of skill in original work.

The time which it is recommended to assign to the systematic study of the requirement in Formal Geometry is the equivalent of a course of five lessons a week for one school year; but it is believed to be advisable to extend this allowance of time over two years.

# 15a. Plane Geometry.

The requirement in Plane Geometry is stated on pages 1-14 of the Syllabus mentioned above.

#### Advanced Mathematics.

12b. Solid Geometry.— Chauvenet's Geometry, Revised and Abridged (Philadelphia: J. B. Lippincott & Co.), Books VI, VII, VIII, and IX, will serve to indicate the nature and amount of the requirement in Solid Geometry.

16. Logarithms and Trigonometry.— The theory of logarithms and the use of logarithmic tables.— Plane trigonometry.— The solution of the right spherical triangle.— Applications to simple problems.

No technical knowledge of the subjects of surveying and navigation, such, for instance, as the methods of parallel or middle latitude sailing, will be required, but such terms as latitude, longitude, angle of elevation or depression, bearing, etc., should be understood. At the examination, candidates are furnished with four-place tables belonging to the University, and are not allowed to use their own tables. Two sets of tables will be provided: (1) The regular Sexagesimal tables\*; (2) a set of tables in which the degree is divided into tenths and hundredths instead of into minutes and seconds.† The questions will be so worded that the candidate may use, with equal facility, whichever set of tables she prefers. The tables provided are distributed before the hour of examination, so that candidates may have at least an hour for becoming acquainted with their arrangement and use. Teachers who wish a still earlier opportunity of seeing these tables should write to the Secretary of Radcliffe College.

# 17. Advanced Algebra.

The requirement in Advanced Algebra includes the following subjects:

- (a) Simultaneous quadratics and equations solved like quadratics; properties of quadratic equations; addition, subtraction, multiplication and division of complex quantities; inequalities; variations; arithmetical and geometrical progressions; mathematical induction; simple problems in choice and chance; continued fractions; scales of notation.
- (b) Determinants, not including the multiplication theorem; simple applications of determinants to linear equations; the solution of numerical equations of higher degree, and so much of the theory of equations (not including multiple roots or Sturm's theorem) as is necessary for this purpose.

<sup>\*</sup> Special reprints from pages 2-5, 8-15, of J. M. Peirce's "Four-Place Tables" (Ginn & Co., Boston), not obtainable separately.

<sup>†&</sup>quot;Four-Place Tables" abridged edition, compiled by E. V. Huntington (for sale by the Harvard Coöperative Society).

The topics included under (a) may be treated briefly. About half the time devoted to the requirements should be spent on the topics included under (b).

# 18-23. Physical Science. \*

# Elementary Physical Science.

18. Elementary Physics.—A course of study dealing with the leading elementary facts and principles of physics, with quantitative laboratory work by the pupil.

The instruction given in this course should include qualitative lecture-room experiments, and should direct especial attention to the illustrations and applications of physical laws to be found in every-day life. The candidate is required to pass a written examination, the main object of which will be to determine how much she has profited by such instruction. This examination may include numerical problems. It will contain more questions than any one candidate is expected to answer, in order to make allowance for a considerable diversity of instruction in different schools.

The pupil's laboratory work should give practice in the observation and explanation of physical phenomena, some familiarity with methods of measurement, and some training of the hand and the eye in the direction of precision and skill. It should also be regarded as a means of fixing in the mind of the pupil a considerable variety of facts and principles. The candidate is required to pass a laboratory examination, the main object of which will be to determine how much she has profited by such a laboratory course.

The candidate must name as the basis for her laboratory examination at least thirty-five exercises selected from a list of about sixty, described in a publication issued by Harvard University under the title, "Descriptive List of Elementary Exercises in Physics." [This list may be obtained, price 40 cents, at the Publication Office, 2 University Hall, Cambridge.] In this list the divisions are mechanics (including hydrostatics), light, heat, sound, and electricity (with magnetism). At least ten of the exercises selected must be in mechanics. Any one of the four other divisions may be omitted altogether, but each of the three remaining divisions must be represented by at least three exercises.

The candidate is required to present a note-book in which she has re-

<sup>\*</sup> For rules relating to the time of handing in note-books and to candidates examined in June in places where no laboratory examination is provided, see p. 29.

corded the steps and the results of her laboratory exercises, and this notebook must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes. These exercises need not be the same as those upon which the candidate presents herself for the laboratory examination, but should be equivalent to them in amount and grade of quantitative work.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in physics. Experience has shown that pupils can make the original record of their observations entirely presentable, so that copying will be unnecessary, and they should in general be required to do so.

This course, if taken in the last year of the candidate's preparation, is expected to occupy in laboratory work, recitations, and lectures, five of the ordinary school periods, about fifty minutes in length, per week for the whole year. With few exceptions exercises like those in the Descriptive List already mentioned can be performed in a single school period, but for satisfactory results it will often be necessary to repeat an exercise. Two periods per week for the year should be sufficient for the laboratory work proper. If the course is begun much earlier than the last year of the candidate's preparation, as it well may be, it will require more time.

19. Chemistry.\*—A course of at least sixty experiments, performed at school by the pupil and accompanied with systematic instruction in principles and their applications, in accordance with directions given in a pamphlet entitled "An Outline of Requirements in Chemistry," issued by Harvard University for the use of teachers only.

The candidate is required to pass both a written and a laboratory examination. The written examination will test her acquaintance with the facts and principles of Chemistry. The laboratory examination will test both her skill in performing experiments and her grasp of the principles involved in them. The candidate is further required to present the original note-book in which she recorded the steps and results of the experiments.

<sup>\*</sup> The course will be mainly an experimental course in theoretical chemistry, but there will be experiments covering all branches of pure chemistry.

ments which she performed at school, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in Chemistry.

**20.** Physiography.— A course of study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Physiography," issued by Harvard University.

For the form of examination see note under Astronomy, below.

After 1908 the examinations in Physiography and Meteorology will be withdrawn, and in place of them will be substituted an examination in Geography. Geography may be substituted for Physiography in 1908.

- **20a.** Geography.— A course of study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Geography," issued by Harvard University.
- 21. Anatomy, Physiology, and Hygiene.— A course of study and laboratory work equivalent to that described in a pamphlet entitled "An Outline of Requirements in Anatomy, Physiology, and Hygiene," issued by Harvard University.

The candidate will be required to pass both a written and a laboratory examination. The written examination will test the range and thoroughness of her knowledge of the elements of Anatomy, Physiology, and Hygiene. The laboratory examination will test (a) her ability to perform the experiments described in the Outline of Requirements, and (b) her knowledge of the first aids to be rendered to the injured.

At the time of the laboratory examination the candidate must present the original note-book containing (with dates) the notes and drawings she has made in the course of her laboratory work, and bearing the endorsement of her teacher, certifying that the book is a true record of the pupil's own observations and experiments. An index of subjects should be appended.

# Advanced Physical Science.

22. Meteorology.— A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Meteorology," issued by Harvard University.

This course requires a knowledge of Elementary Physics. (For the form of examination see under Astronomy, below.)

After 1908 the examinations in Physiography and Meteorology will be withdrawn, and in place of them will be substituted an examination in Geography. (See 20a.)

23. Astronomy.— A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Astronomy," issued by Harvard University.

This course requires a knowledge of Geometry.

In Physiography, Meteorology, and Astronomy, the candidate will be required to take both a written and a laboratory or practical examination. The written examination may test her understanding of observational methods appropriate to the subject, but will call chiefly for a knowledge of facts and principles. The laboratory or practical examination will test her skill in observation as well as her grasp of principles. This examination can be taken in Cambridge only; for those who are examined elsewhere in June, it will be postponed to September.

The laboratory examination in Physiography may include the description, explanation, and comparison of geographical features shown in photographs, maps and models. The laboratory examination in Meterology may include the use of instruments, the discussion of observations, and the construction and interpretation of weather maps and climatic charts. The practical examination in Astronomy may call for an ability to make simple naked-eye and instrumental observations, and to establish the simpler generalizations of astronomy by discussion of these observations.

The candidate in these subjects will be required to present, at the time of the laboratory or practical examination, the original note-book in which she recorded, with dates, the steps and results of the observations which she made at school. This book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. An index of subjects should be appended. The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of her work through an extended course of observational study, and that her work has been of a satisfactory character; but greater weight will be given

to the practical or laboratory examination than to the note-book in determining the candidate's attainments.

#### LABORATORY EXAMINATIONS.

A candidate who is examined in any study in which a laboratory examination is held will hand in her laboratory note-book at the hour of the laboratory examination. Laboratory note-books will be deposited, after examination, in the Secretary's office, where they will be kept for a reasonable time, subject to the order of the owners.

A candidate examined in June at any place where a laboratory examination is not provided will be required to take such an examination in Cambridge in the autumn of the year in which she enters College; but if she passes the written examination in June, the subject will be temporarily counted in her favor in determining the question of her admission to College.

#### EXAMINATION PAPERS.

A set of recent examination papers will be sent free to any address, on application to the Publication Agent of Harvard University, 2 University Hall, Cambridge.

Separate papers may be had in quantities of not less than six copies of any one paper, (not one each of six different papers) at ten cents a dozen.

#### CERTIFICATES.

The College does not accept certificates of secondary schools in place of entrance examinations. The testimony of teachers is, however, highly valued and is given special consideration in all cases in which the evidence of examinations appears inconclusive. On the receipt of each application for admission a blank form will be sent to the headmaster of the school, requesting the candidate's record and any facts about her character and scholarship which will be helpful to the Committee on Admission.

#### CERTIFICATES FOR PRELIMINARY EXAMINATIONS.

A Preliminary examination is an examination taken at any period (June or September) antecedent to the Final examination at which the candidate completes her admission record. If a candidate divides her examinations among several periods, those of every period except the last

are Preliminary. At each registration for Preliminary examinations the candidate must present a certificate from her school or tutor, naming the subjects in which she is recommended. A candidate passing Preliminary examinations will be credited only with those subjects in which she is recommended.

#### CERTIFICATES OF HONORABLE DISMISSAL.

Every candidate for admission is required to furnish a certificate of honorable dismissal from the school or college she has attended, or from the tutor with whom she has studied. If a candidate has within a year left one school for another, or for a private tutor, any certificate received from the second school or private tutor must be accompanied by the written consent of the principal of the first school.

#### OPTIONAL EXAMINATIONS.

A candidate who has extended her studies beyond the requirements for admission may present herself for examination in additional studies and thus qualify herself to pursue more advanced courses in those subjects in College and anticipate work which counts towards a degree, but no extra admission subject will be counted as a course or half-course towards a degree unless offered in advance as the equivalent of a College course, and unless the examination book has been read with that end in view, and marked not lower than C.\* Examinations in elective studies that are not equivalent to admission studies may also be taken provided the courses are of such a character that they may properly be anticipated by examination, but the number of courses that may thus be anticipated is very small. Such examinations are held only in the first fortnight of the academic year and only at Cambridge. Written notice of intention to take these examinations must be in the hands of the Secretary not later than September 10.

AFTER 1908 a candidate who has extended her studies beyond the requirements for admission may present herself for examination in the prescribed studies of the Freshman year, and in elective studies provided

<sup>\*</sup> The following are the College courses to which admission studies correspond, Elementary German corresponds to German A, Elementary French to French A. Elementary Physics to Physics B, Harmony to Music 1, Advanced German to German 1a, Advanced French to French 1a, Logarithms and Trigonometry to Mathematics A, Solid Geometry to Mathematics E, Advanced Algebra to Mathematics D, Counterpoint to Music 2.

the courses she wishes to anticipate are of such a character that they may properly be anticipated by examination. The prescribed studies of the Freshman year may be anticipated by the admission examinations, English A, Elementary French, Elementary German. Examinations for the anticipation of elective courses are held only in the first fortnight of the academic year, and only at Cambridge. Petitions to be allowed to anticipate elective studies by examination must be in the hands of the Secretary not later than September 10.

#### ADMISSION TO ADVANCED STANDING.

Graduates of other colleges and students who have completed creditably the work of at least one year at other colleges may be admitted without examination to the standing for which their previous training seems to qualify them.

Every person wishing to enter under this provision must make a complete written statement of the work on which she bases her application. Blank forms of application for admission may be obtained from the Secretary.

Much importance is attached to the quality of the work offered. The applicant should furnish: (1) official statements of her rank or grade in her various college studies: (2) letters, or other evidence, showing the opinion her instructors have formed of her character and scholarship: (3) a letter of honorable dismissal from the college whence she comes.

#### SPECIAL STUDENTS.

Applicants who pass a satisfactory examination on a smaller number of subjects than are called for in the full Requirements may be admitted, at the discretion of the Academic Board, to such special courses as they seem qualified to pursue.

Students of mature age, who wish to pursue chiefly higher courses of study, may be admitted, at the discretion of the Academic Board, without passing the examination for admission, provided that they satisfy the instructors in the courses which they elect of their fitness to pursue them.

Every special student is expected to take four courses of study.

Special students may, on application, receive, at the end of their term of study, certificates stating the courses in which they have passed satisfactory examinations, and giving the grade to which they have been assigned in each course.

Special students should make application before the first day of September.

#### STUDENTS AND EXAMINATIONS.

Undergraduates are expected to make their choice of elective studies before the first day of September, and no changes are allowed after October 1, except by leave of the Academic Board. Applications for changes must be made to the Academic Board in writing, with a statement of reasons.

The student's choice is limited to those studies which her previous training qualifies her to pursue; and she must observe any restrictions that may be attached to the particular courses she wishes to select. She is further required to avoid any conflict of recitation hours or of examinations between her courses.

No starred (\*) course may be chosen without the *previous* consent of the Instructor. Application should be made, if possible, before the summer vacation.

An undergraduate who wishes to take a Graduate course is required to consult the Instructor in advance; if possible she should do this before the summer vacation. She will be admitted to the course on the recommendation of the Instructor, which must be given in writing.

Not more than one Course of Research may be taken in any year by an undergraduate.

All students are expected to attend all the exercises and to pass all the examinations in the courses which they elect, unless excused by special vote of the Academic Board. Applications for excuses must be made to the Secretary in writing with the reasons.

#### LODGINGS FOR STUDENTS.

Students may learn of lodging-places approved by the Students' Committee by enquiring of the Dean. The ladies of the Standing Committees will be glad to assist students by their advice.

The two halls, Bertram Hall and Grace Hopkinson Eliot Hall, are situated on Shepard Street, seven minutes' walk from the College. Bertram Hall, under the charge of a resident mistress, Miss E. M. Hoppin, accommodates twenty-five students; Grace Hopkinson Eliot Hall, under the charge of Miss Grace E. Machado, forty-three students. The rooms

are furnished. The price of board is \$216 a year, \$6 a week for the thirty-six weeks from the last Wednesday in September to the day before Radcliffe Class Day, exclusive of the Christmas and the Spring recess, as fixed by the College catalogue. Students may remain at an extra charge of \$10 for the Christmas recess, \$7 for the Spring recess, \$6 for the week ending the day after Radcliffe Commencement, or \$1.50 a night. The charges for rooms vary from \$54 each to \$325 for a study and bedroom. These charges include all expenses for furnishing, service, heating and light. Applications for rooms should be made to Miss Caroline L. Humphrey, Radcliffe College, before May 1, as assignments are made during the month of May, but they will be considered later as vacancies may occur. Every application must be accompanied by a deposit with the Treasurer of \$15; otherwise the application will not be registered. Further details are given in a special leaflet describing the halls of residence.

All arrangements for boarding and lodging are to be subject to the approval of the Dean.

Any change of address must be at once reported to the Dean and to the Secretary.

#### GRADUATE STUDENTS.

#### ADMISSION.

Bachelors of Arts of Radcliffe College, and Graduates of other Colleges of good standing who present satisfactory evidence of character and qualifications, are admitted without examination as Graduate Students in Radcliffe College.

An application for admission may be made by filling out a registration blank and depositing it at the office. If the applicant is not a graduate of Radcliffe College, she must also file, for the consideration of the Academic Board, satisfactory certificates of scholarship and character; and if she holds a degree from any institution, she must present diplomas or official certificates, sufficient to furnish evidence of her holding such degree or degrees.

Admission as a Graduate Student does not imply admission to candidacy for a Degree.

Graduate Students, not Bachelors of Arts of Radeliffe College, who wish to become candidates for any degree, should make early application, at the beginning of the Academic Year if possible, in order to learn the conditions under which they may be accepted as qualified for candidacy.

#### RESIDENCE.

Graduate Students are required to be in regular attendance on the exercises in some course or courses of instruction, and to do all the required work (including all examinations) in the courses which they elect; or to carry on regular work in some Laboratory or Museum or in the Library, under the frequent inspection and criticism of some specified instructor or instructors.

#### STUDIES.

The instruction open to students in Radcliffe College is arranged in one list of Courses of Instruction, consisting of Full Courses and Half-Courses. These are distributed into *three groups* in the several branches of study, namely,

- (1) Courses designed primarily for Undergraduates.
- (2) Courses for Graduates and Undergraduates.
- (3) Courses primarily for Graduates.

Any course (or half-course) in the list is open to all Graduate Students who present sufficient evidence of qualification for that course. It is sometimes advisable, and is not unusual, for a graduate student to choose some of her studies from the First, or Undergraduate, Group; but such studies are not ordinarily counted for the degree of A. M. Many of the studies of the Second Group are distinctly of Graduate grade, in the sense of being in advance of such as are ordinarily pursued for a Bachelor's degree. They are thorough and comprehensive courses, characterized by advanced methods of instruction and study; and are in fact largely chosen by Graduate Students, and found suitable to their needs. To some of these courses, undergraduates are admitted only by special leave of the instructor. To the courses of the Third Group, undergraduates are admitted only on the recommendation of the instructor.

Among the higher courses of instruction — of the Second and Third Groups — in nearly every department of study, are Courses of research and Seminaries, for students who wish to do special work of an advanced character. These courses are carried on under various plans of administration in the several departments, but always with the object of affording opportunity for regular independent study.

A complete year's work for a Graduate Student regularly consists of four full courses of instruction, of advanced grade, or of their equivalent in courses and half-courses, pursued throughout an academic year. If the work is to

be counted toward a degree it must be completed with distinction. All the work required in such courses must be done, and all the examinations must be passed, unless the student has leave from the Academic Board, with the approval of the Instructor, to omit some part of the ordinary requirement.

Every Graduate Student is required to file a list of her studies for the year (or at least for the first half-year), at the time she registers, with the Secretary,— or within two days thereafter, at the office. In the preparation of this list she is advised to consult with the instructors or with the chairman of the Division or Department concerned. If a change in the list is subsequently made, written notice must be filed at the office.

A student who wishes to devote her time, largely or wholly, to special study of an advanced character may count a course embracing such study as equivalent to more than one course, up to a complete year's work, or may carry on such study outside and in place of the regular courses, under the direction and supervision of some specified instructor or instructors. In either case, the substitution proposed must have the approval or consent in writing of the Instructor or Instructors concerned; and the permission of the Academic Board is required.

#### DEGREES.

The requirements for the degrees of Bachelor of Arts and Master of Arts are as follows:

In order to be recommended for the degree of Bachelor of Arts, a candidate must have passed in studies amounting to sixteen courses, together with such work in English as may be prescribed for her; making a total of seventeen or seventeen and a half courses, as the case may be. She must, moreover, have attained a grade above D in at least two-thirds of all the work done by her in Radcliffe College in satisfaction of the requirements for the degree, and in her Senior year must have passed in not less than four courses, with grades above D in at least two of them.

An undergraduate must take, in each academic year, at least four courses, in addition to such work in English as may be prescribed for her; and (including her prescribed English) she may take five, but not more, as regular courses to be counted towards the degree. Certain studies taken in the Harvard Summer School may also be counted towards the degree.

The ordinary requirement for the degree of MASTER OF ARTS for a graduate of a college of good standing consists of at least one year of residence

and study devoted to advanced work approved by the Academic Board of Radcliffe College as affording suitable preparation for the degree and completed with high credit. Other persons will be admitted to the degree on conditions to be determined in each case.

The programme of study for the degree of Master of Arts must form a consistent plan of work pursued with some definite aim, though it need not lie wholly in one Department or field. This work may be done either in, or in connection with, the regular courses of instruction, or independently of them. In the latter case it must be carried on under the guidance of some specified instructor. Programmes should be submitted early in the academic year, and no programme will be approved that is received after January 15 of the academic year in which the degree is to be taken.

No student may count for the degree of Master of Arts courses which she has taken as an undergraduate.

All diplomas are countersigned by the President of Harvard University and bear the University seal.

# TUITION FEES.

The annual tuition fee for a student doing full work is *two hundred dollars*, in addition to the special laboratory fees named below. It is payable, one hundred and twenty-five dollars on October 1, seventy-five dollars on February 1.

For those students who are permitted by the Academic Board to take less than four courses, two-thirds of the fee is payable on October 1, the remaining third on February 1. The charges are as follows:—

For any regular course, not a laboratory course or course of research, sixty dollars; for any half-course, not a laboratory course, thirty dollars; for a course of research or for a laboratory course, besides the special laboratory fees, a sum equal to the fee for one, two, or more courses, according to the number of courses to which the Academic Board shall consider it equivalent as part of the student's work for the year. But the minimum fee charged for any student is forty dollars, and the maximum fee, in addition to the special laboratory fees, is two hundred dollars, covering any number of courses that a student is permitted to take.

Students in laboratory courses pay in addition a special laboratory fee of five dollars for each course and of five dollars or two and a half dollars for each half-course.

No student will be admitted for any shorter time than a whole academic year, except by special vote of the Academic Board.

A student doing full work and therefore liable for the full tuition fee of two hundred dollars is entitled to a partial remission of fee in case of properly notified withdrawal from college or protracted absence, as follows: If she withdraws in the course of the academic year she is charged only to the end of the third in which she withdraws, provided that before that time she gives written notice of her withdrawal to the Dean; otherwise she is charged to the end of the third in which such written notice is given.

If she is absent with the consent of the Academic Board for three consecutive months she is entitled to a deduction of fifty dollars from the year's tuition fee; if she is absent for the whole year, not including the midyear and final examinations or either of them, she is entitled to a deduction of one hundred and fifty dollars provided she has given in either case previous notice of her intended absence to the Secretary.

In the case of students liable for less than the full fee of two hundred dollars no deduction is made for absence or withdrawal.

No student is entitled to a reduction of fee on account of withdrawal from a course or courses after the year has begun unless she withdraws from the college and then only if she has been doing full work.

No claim for deduction of fee will be considered if presented after the close of the Academic year in which the absence or withdrawal took place.

Elizabeth Cary Agassiz House, opened in 1905, contains, in addition to the theatre, a lunch room, living room, reading room, locker room and quiet rooms for the daily use of all the Radcliffe students. In 1905–06 a large part of the running expenses of Agassiz House was defrayed by voluntary contributions. The Council voted (on May 4, 1908) that each student registered in Radcliffe College in 1908–09 be required to pay \$5 for the use of Agassiz House. This amount will be charged on the first term bill.

No student is permitted to attend any college exercise after October 15th in any year unless all bills previously rendered for that year have been paid; and similarly no student is permitted to attend any College exercise after March 1st unless all bills previously rendered have been paid; and in no event is any degree conferred unless all dues to the College have been paid at least twenty-four hours before Commencement Day.

# THE CHARLES ELIOT NORTON FELLOWSHIP IN GREEK STUDIES.

In 1902, James Loeb, of the Class of 1888, gave securities valued at four-

teen thousand one hundred dollars for the permanent establishment of this fellowship, which he had maintained during the year 1901-02, "in grateful recognition of the long and great friendship which Professor Norton has shown him since his boyhood, and in order to record in a fitting manner the eminent services which Professor Norton has rendered the cause of Archæology, and his beneficent prominence in the Archæological Institute of America and the American School of Classical Studies at Athens."

Competition for the fellowship is open to members of the Senior Class in Harvard College and of the Graduate School of Arts and Sciences of Harvard University, and to Seniors and Graduate Students in Radcliffe College. It has an annual income of six hundred dollars.

The award will be made by a committee appointed by the Department of the Classics, of which committee Professor Norton is to be a member during her life, on the basis (1) of a thesis on a subject approved by this committee, and (2) of such other evidence of scholarship as may be accessible. In the award, no account is to be taken of the financial means of the competitor; and no award will be made in case the these offered are not of sufficient merit.

The editors of the Harvard Studies in Classical Philology are to have the right to publish the thesis of the successful candidate.

The incumbent of the fellowship must agree to pursue his studies for the year of her incumbency at the American School of Classical Studies at Athens, and to devote herself to the study of some special subject approved by the committee, in the field of Greek History, Literature, Art, Archæology, Epigraphy, or Topography. She shall also agree to write and publish, at the end of the year of her fellowship, a monograph embodying the results of her investigations.

In accordance with the terms of the fellowship, the award will be made in the Spring of 1909, for the academic year 1909-10. The following subjects for theses are proposed by the Committee:—

- (1) The Geography of Thucydides.
- (2) The Contributions of Greek Epigraphy to Geographical Knowledge.
- (3) Proverbial Philosophy in Plato.
- (4) The Ethics of Pindar.
- (5) The Influence of Democracy on the Character of Attic Oratory.
- (6) Plato's and Aristotle's Conception of the Art of Music in its Relation to Education and Life.
- (7) Funeral Rites in Greek Poetry and Art of the Fifth Century: with a Study of their Inner Significance.
- (8) The Evidence of the Intention of Pericles to Substitute Athena for Apollo as the National Divinity.

Candidates may, however, with the consent of the Committee, write on other classical subjects.

Applications for admission to candidacy must be made to the Chairman of the Department of the Classics not later than December 1, 1908; and the theses of approved candidates must be presented to the Chairman not later than March 1, 1909.

#### ELIZABETH ALLEN PATON MEMORIAL FELLOWSHIP.

A Fellowship of \$100, established for the year 1905–06, has been continued for the year 1907–08 by Lucy Allen Paton, (A. B. 1892, Ph. D. 1902) in memory of her mother, Elizabeth Allen Paton. The conditions are as follows: It is to be awarded to a graduate student who has already begun some piece of advanced research in the departments of English or Modern Languages which she wishes to complete at Radcliffe, the fellowship to be awarded entirely without regard to her financial circumstances, and only as a recognition of her character and scholarship.

This Fellowship was awarded in 1905-06 to Muriel Bothwell Carr, (McGill University) A. B. 1898, A. M. 1900, (Radcliffe) A. M. 1902.

It was awarded in 1906-07 to Gertrude Schoepperle, (Wellesley) A. B., 1903, A. M. 1905.

# SCHOLARSHIPS.

Applications for scholarships should be addressed to the Dean of Radcliffe College, and should be in the hands of the Dean on or before the first of June, 1908.

#### THE EDWARD AUSTIN SCHOLARSHIPS.

In 1899, the sum of \$25,500 was received by Radcliffe College in settlement of the bequest of \$30,000, made by Edward Austin, the income thereof to be paid to "needy, meritorious students and teachers, to assist them in payment of their studies."

In 1900 the heirs of Edward Austin gave \$2,250 to be added to this fund.

For the year 1907–08 five scholarships were awarded from the income of this fund.

One scholarship of \$200 to Margaret Gold Batchelder (Allegheny College) A. B. 1900.

One scholarship of \$200 to Dorothy Foster (Bryn Mawr College) A. B. 1904.

One scholarship of \$200 to Dorothea Kern Jewett (*University of California*) A. B. 1905, A. M. 1906, graduate student (*Radcliffe College*) 1906-07.

One scholarship of \$200 to Kate Fairbanks Puffer (Smith College) A. B. 1900, graduate student (Radcliffe College), 1905-07.

One scholarship of \$200 to Francis Ellis White, of the class of 1910.

#### THE HARVARD ANNEX SCHOLARSHIP.

By gift of the Alumnae and students of the "Harvard Annex" and their friends, an annual scholarship has been established to be known as "The Harvard Annex Scholarship founded by Alumnae of Radcliffe College." The fund provides for the tuition fees of one student.

In 1907–08 this scholarship was awarded to Margaret Coleman Waites (*Radcliffe College*) A. B. 1905, A. M. 1906.

#### THE ELLEN M. BARR SCHOLARSHIPS.

By the terms of the will of the late Ellen M. Barr, the residue of her estate, after the payment of debts and legacies, was bequeathed to Radcliffe College. Subject to the payment of an annuity, the income of this bequest is to be applied "in the form of annual scholarships of not less than two hundred and fifty dollars and not more than three hundred dollars each, for the benefit of students in Radcliffe College, who, in point of character, ability and physical constitution, give promise of future usefulness, and who stand in need of pecuniary assistance."

In 1907-08 five scholarships from this fund, of the value of \$250 each were awarded to Florence Ellen Lahee, of the class of 1908; and to Marion Whitney Bowler, Marjorie Fay, Emma Frost and Blanche Evelyn Spring, of the class of 1909.

#### THE ELLA LOWELL LYMAN MEMORIAL SCHOLARSHIP.

By gift of Mr. Arthur T. Lyman of Boston, an annual scholarship has been established in memory of his wife, Ella Lowell Lyman. The fund provides for the tuition fees of one student.

In 1907-08 this scholarship was awarded to Dorothea Clapp, of the Class of 1909.

#### THE ELIZABETH CARY AGASSIZ SCHOLARSHIP.

The Elizabeth Cary Agassiz Scholarship is a gift to Radcliffe College from various friends of Mrs. Agassiz, who wished that it should bear her name. The fund provides for the tuition fees of one student.

In 1907-08 the income from this scholarship was awarded to Florence Alden Gragg (Radcliffe College) A. B. 1899, A. M. 1906.

#### THE AGNES IRWIN SCHOLARSHIP.

By gift of six hundred and eighty former pupils of the first Dean of Radcliffe College, the Agnes Irwin Scholarship has been established. By the terms of the gift the student to have the benefit of this scholarship is to be appointed by Miss Agnes Irwin, and all details regarding it are to be arranged by her for the present and the future. The fund provides for the tuition fees of one student.

In 1907-08 this scholarship was awarded to Elizabeth Copley Singleton, of the Class of 1908.

#### THE WIDOW JOANNA HOAR SCHOLARSHIP.

The College has established the Widow Joanna Hoar Scholarship with funds contributed by an unknown friend in memory of the widow of Charles Hoar, Sheriff of Gloucester in England, who came to America with her children in 1638. In awarding this scholarship preference is to be given to natives of Concord, Mass., or to daughters of citizens of that place. The fund at present provides for the tuition fees of one student.

In 1907-08 this scholarship was awarded to Miriam Choate Foster, of the Class of 1910.

#### THE MARIA DENNY FAY MEMORIAL SCHOLARSHIP.

An annual scholarship of two hundred dollars (\$200) has been established which provides for the tuition fees of one student.

In 1907-08 this scholarship was awarded to Florence Lillian Ordway, of the Class of 1910.

#### THE JOSIAH M. FISKE MEMORIAL SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske, of New York, an annual scholarship has been established in memory of her late husband, Josiah M. Fiske, who was once a resident of Cambridge. The fund provides for the tuition fees of one student.

In 1907-08 this scholarship was awarded to Eleanor Richardson, of the class of 1910.

#### THE CANTABRIGIA SCHOLARSHIP.

The Cantabrigia Scholarship was founded in 1903 from a gift made by the Cantabrigia Club of Cambridge. The income provides for the tuition fees of one student, and will be awarded by preference to a resident of Cambridge.

In 1907-08 this scholarship was awarded to Ruth Macdonald Brigham, of the class of 1910.

#### THE ABBY W. MAY SCHOLARSHIP.

By the terms of the will of the late Sarah Wyman Whitman, of Boston, an annual scholarship of two hundred dollars (\$200) has been established in memory of Abby W. May. The fund provides for the tuition fees of one student.

In 1907-08 this scholarship was awarded to Mabelle Crystale Dame, of the class of 1908.

#### THE MARY ELIOT PARKMAN SCHOLARSHIP.

By the terms of the will of the late Sarah Wyman Whitman, of Boston, an annual scholarship of two hundred dollars (\$200) has been established in memory of Mary Eliot Parkman. This fund provides for the tuition fees of one student.

In 1907–08 this scholarship was awarded to Edna Thurston Wilson, of the class of 1909.

#### THE JAMES A. WOOLSON SCHOLARSHIP.

By the terms of the will of the late James A. Woolson, of Cambridge, an annual scholarship of two hundred dollars (\$200) has been established which provides for the tuition fees of one student.

In 1907-08 this scholarship was awarded to Ruth Adelaide Finberg, of the class of 1910.

#### THE CAROLINE A. KENNARD SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske Collord, of New York, an annual scholarship was established in December 1907, in memory of her sister, Mrs. Caroline A. Kennard. This scholarship is to be given ordinarily to a student wishing to pursue studies in science. The fund provides for the tuition fees of one student.

# PRIZES.

### THE SARGENT PRIZE.

This prize was first offered in 1886–87 by John Osborne Sargent of New York, of the class of 1830, and was endowed in his memory, in 1892, by his daughter, Georgiana W. Sargent. The prize is of one hundred dollars, and is offered for the best metrical translation of a lyric poem of Horace, to be selected each year by the Department of the Classics.

The selection for 1909 is the twenty-first Ode of the third Book.

Undergraduates of Harvard College and of Radcliffe College may compete for this prize. The prize may be withheld if no competitor appears to deserve it.

The versions must be neatly and legibly written or typewritten, upon letter paper of good quality, of the quarto size, with a margin of not less than one inch at the top, at the bottom, and on each side; and the sheets must be securely stitched or riveted together. The title-page of each manuscript must bear an assumed name, with a statement of the writer's academic standing; and the writer must give in, with her manuscript, a sealed letter, containing her true name and superscribed with her assumed name.

The manuscript must be deposited with the Dean of Radcliffe College on or before the first day of May, 1909.

In 1890 the Sargent Prize was awarded to Helen Leah Reed, of the class of 1890.

In 1892 the Sargent Prize was awarded to Margaret Foster Herrick, a special student.

In 1901 the Sargent Prize was awarded to Norma Rose Waterbury, of the class of 1904.

#### THE GEORGE B. SOHIER PRIZE.

This prize was founded by the late Waldo Higginson of Boston, of the Class of 1833 in Harvard College, in memory of his brother-in-law George Brimmer Schier of the Class of 1852. The endowment is for "one prize of \$250 for the best thesis presented by a successful candidate for Honors in English or in Modern Literature. If no thesis is deemed worthy of a prize, no prize will be given." "The competitors may be either: — (1) undergraduates in Harvard College, (2) Harvard graduates who are resident at the University as students in the Graduate School, or (3) students in Radcliffe College."

In 1897 the Sohier Prize was awarded to Beulah Marie Dix, of the class of 1897. Subject: "Published Collections of English and Scottish Ballads, 1765–1802."

In 1904 the Sohier Prize was awarded to Frances Elizabeth Newell, of the class of 1904. Subject: "Geoffrey of Monmouth and the Sabrina Legend."

#### THE CAROLINE I. WILBY PRIZE.

This prize was founded in 1897 in memory of Miss Caroline I. Wilby, by her friends and former pupils.

The fund, originally \$3,060, has been somewhat increased, and the income is to be given annually to a Radcliffe student as a prize "for the best origi-

nal work in any department."

The Wilby Prize was given for the first time in 1899 to Kate O. Petersen, (Vassar) A. B. 1890, (Radcliffe) A. M. 1895, Radcliffe graduate student, 1895–97, for a thesis on the Sources of Chaucer's Nonne Prestes Tale, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1900 to Lucy Allen Paton, A. B., 1892, A. M. 1894, Ph. D. 1902, for a thesis on Morgain la Fée, published in the

series of Radcliffe College Monographs.

The Wilby Prize was given in 1904 to Belva Mary Herron (*University of Michigan*) B. L., 1899, Radcliffe graduate student 1903-04, for a paper on the Progress of Labor Organization among Women, and to Caroline Strong, A. B., 1903, A. M. 1906, for a thesis on the Tail-Rhyme Strophe in English Poetry.

The Wilby Prize was given in 1905 to Eleanor Harris Rowland, A. B. 1903, A. M. 1904, Ph. D. 1905, for her Doctor's dissertation on the Aesthetics of the Repetition of Visual Space Forms.

The Wilby Prize was given in 1906 to Frances Hall Rousmaniere, (Wellesley) A. B. 1900, A. M. 1904, (Radcliffe) Ph. D. 1906, for a paper on Certainty and Attention.

The Wilby Prize was given in 1907 to Mabel Ellery Adams, Radcliffe special student 1896–1904, 1905–07 for a thesis entitled, An Inquiry into the Condition of one hundred deaf persons who have been pupils at the Horace Mann School in Boston.

The prize may be withheld if no thesis or original work is deemed worthy of it.

#### SUSAN ANTHONY POTTER PRIZE.

This prize is offered for the year 1908–09 by Professor M. A. Potter, in memory of his mother, Susan Anthony Potter. The prize is of one hundred dollars, and is to be given for the best thesis by a student in Harvard University or Radcliffe College, graduate or undergraduate, on any subject in the field of Comparative Literature approved by the Chairman of the Department of Comparative Literature.

Candidates should submit their subjects to Professor W. H. Schofield early in the autumn of 1908. May 1, 1909, will be the last day for receiving theses in competition.

#### PLACES OF EXAMINATIONS.

In September examinations will be held in Cambridge only.

The examinations in June, 1908, will be held at the following places, if applications are received by June 10. Other places may be added to this list later.

#### CALIFORNIA.

Belmont, in the rooms of Belmont School. Los Angeles, in the rooms of the Harvard School.

#### COLORADO.

Colorado Springs, in the rooms of Colorado College.

#### CONNECTICUT.

Bridgeport, in the rooms of the University School. Washington, in the rooms of the Gunnery School.

#### DISTRICT OF COLUMBIA.

Washington, in the rooms of the Central High School.

#### GEORGIA.

Atlanta, in the rooms of the Boy's High School.

#### Illinois.

Chicago, in the rooms of the Law School of Northwestern University, southeast corner of Dearborn and Lake Streets.

#### INDIANA.

Indianopolis, in the rooms of the Shortridge High School.

#### Iowa.

Des Moines, in the rooms of the West High School.

#### KENTUCKY.

Louisville, in the rooms of the Boys' High School, First Street.

#### MAINE.

Gardiner, in the rooms of the Gardiner High School. Portland, in the rooms of the Portland High School.

#### MARYLAND.

Baltimore, in the rooms of Baltimore City College.

#### MASSACHUSETTS.

Andover, in the rooms of Phillips Academy.
Brookline, in the rooms of the High School.
Cambridge, at 10 Garden Street.
Concord, in the rooms of the High School.
Fall River, in the rooms of the B. M. C. Durfee High School.
Fitchburg, in the rooms of the Fitchburg High School.
Lowell, in the rooms of the Lowell High School.
Lynn, in the rooms of the Classical High School.
Milton, in the rooms of Milton Academy.
Quincy, in the rooms of the Quincy High School.
Springfield, in the rooms of the Springfield High School.
Worcester, in the rooms of Worcester Academy.

#### MICHIGAN.

Detroit, in the rooms of the University School.

#### MINNESOTA.

St. Paul, in the rooms of St. Paul Academy, corner Portland Avenue and Dale Street.

#### MISSOURI.

Kansas City, in the rooms of the Central High School. St. Louis, in the rooms of the Board of Education, 9th and Locust Streets.

#### NEW HAMPSHIRE.

Exeter, in the rooms of Phillips Exeter Academy. Manchester, in the rooms of the Manchester High School.

NEW JERSEY.

Newark, in the rooms of the High School.

NEW YORK.

Buffalo, in the rooms of the Central High School, corner of Court and Franklin Streets.

New York, in the rooms of The Sachs School for Girls, 116 West 59th Street.

Utica, in the rooms of the Utica Free Academy.

Оню.

Cincinnati, in the rooms of the Young Men's Christian Association. Cleveland, in the rooms of Adelbert College.
Youngstown, in the rooms of Rayen School.

OREGON.

Portland, in the lecture-room of the Portland Library.

PENNSYLVANIA.

Philadelphia, in the rooms of the Central High School. Pittsburg, in the room of Shady Side Academy.

RHODE ISLAND.

Providence, in the rooms of the Hope Street High School.

TEXAS.

Dallas, in the rooms of the Oak Grove School.

WASHINGTON.

Seattle, in the rooms of the Central School, No. 15. Spokane, in the rooms of the High School.

WISCONSIN.

Milwaukee, in the rooms of the East Division High School.

HAWAII.

Honolulu, in the rooms of Oahu College.

ENGLAND.

London, in the rooms of the University of London.

GERMANY.

Bonn, at the Hotel Royal.

SWITZERLAND.

Geneva, at the Hotal Beau-Rivage.

#### RADCLIFFE COLLEGE.

# ORDER OF EXAMINATIONS. (June and September.)

Monday, June 22 and September 21.

- 8-9 A. M. All candidates meet at 10 Garden Street the officer in charge of the examinations.
  - 9-10. Elementary Physics. 2-4. Geometry.
- $10\frac{1}{4}$ - $11\frac{1}{4}$ . Chemistry.  $2-3\frac{1}{2}$ . Plane Geometry.
  - 11 $\frac{1}{2}$ -1. Elementary Algebra. 3 $\frac{1}{2}$ -4 $\frac{1}{2}$ . Solid Geometry. 4 $\frac{2}{3}$ -6 $\frac{1}{4}$ . Elementary French.

# Tuesday, June 23 and September 22.

- $8\frac{1}{2}-10\frac{1}{2}$ . Elementary English.  $1\frac{3}{4}-3\frac{3}{4}$ . Elementary Latin.  $8\frac{1}{4}-11\frac{1}{4}$ . English A. 4-6. Advanced Latin.
- 11<sup>3</sup>/<sub>4</sub>-12<sup>3</sup>/<sub>4</sub>. Geography or Physiography.

# Wednesday, June 24 and September 23.

- 8-9. Logarithms and Trigonometry. 2-31. Elementary German.
- $9\frac{1}{4}-10\frac{3}{4}$ . Elementary History.  $3\frac{3}{4}-5\frac{3}{4}$ . Elementary Greek.
  - 11-1. Advanced French.

# Thursday, June 25 and September 24.

- $8\frac{1}{2}-10\frac{1}{2}$ . Advanced German.  $1\frac{1}{2}-3\frac{1}{2}$ . Advanced Greek.
- $10\frac{5}{4}-12\frac{5}{4}$ . Advanced History.  $3\frac{5}{4}-4\frac{5}{4}$ . Advanced Algebra. 5–6. Anatomy.

# Friday, June 26, and September 25.

- 9-10½. Harmony. 2-3. Astronomy.
  - 11-1. Counterpoint.

# Saturday, June 27 and September 26.

2-3. Meteorology.

#### LABORATORY EXAMINATIONS.

In June, classes from schools near Cambridge take the laboratory examinations in Physics and Chemistry on earlier days.

#### SEPTEMBER EXAMINATIONS.

The September Examinations will be held in Cambridge only, on Monday, Tuesday, Wednesday, Thursday, Friday and Saturday, September 21, 22, 23, 24, 25 and 26.

#### EXAMINATIONS IN FRENCH A, AND GERMAN A.

The examinations in French A and German A correspond to the admission examinations in Elementary French and German, and will be held on Monday, June 22, and Monday, September 21, and on Wednesday, June 24 and Wednesday, September 23, respectively.

#### COLLEGE ENTRANCE EXAMINATION BOARD.

In June, 1908, papers of the College Entrance Examination Board may be substituted for corresponding papers set for the separate admission examinations held by Harvard University but no candidate may offer both Harvard and Board examinations in the same subject. For more particular information apply to the Secretary of Radcliffe College.

The examinations of the Board will be held June 15-20, 1908. Applications to attend the Board's examinations must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, N. Y., and must be made upon a blank form to be obtained

from the Secretary of the Board upon application.

Applications for examination at points in the United States east of the Mississippi River (also at Minneapolis, St. Louis, and other points on the Mississippi River) must be received by the Secretary of the Board on or before Monday, June 1, 1908; applications for examination elsewhere in the United States or in Canada must be received on or before Monday, May 25, 1908; and applications for examination at points outside the United States and Canada must be received on or before Monday, May 11, 1908. Applications received later than the dates named will be accepted when it is possible to arrange for the examinations of the candidates concerned, but only upon the payment of \$5.00 in addition to the regular examination fee.

The examination fee is \$5.00 for all candidates examined at points in the United States and Canada, and \$15.00 for all candidates examined at points outside of the United States and Canada. The fee (which cannot be accepted in advance of the application) should be remitted by postal order, express order, or draft on New York, to the order of the College Entrance Examination Board.

A list of the places at which examinations are to be held by the Board in 1908 may be obtained by addressing the Secretary of the Board, Professor N. G. McCrea, P. O. Sub-Station 84, New York, N. Y.

Monographs prepared by the students are published and sold by Messrs. Ginn & Company.

Besides the present publication, Radcliffe College issues annually a list of its Courses of Study and an Annual Report. These documents, and also separate pamphlets, published by Harvard University giving detailed accounts of the work of the principal departments, may be had by addressing

Radcliffe College,

Cambridge, Massachusetts.

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UNIVERSITY OF ILLINOIS

# Radcliffe College

CAMBRIDGE, MASSACHUSETTS

1909

\*\*\* The legal title of the Corporation (to be used in making gifts and bequests) is "RADCLIFFE COLLEGE." It should be described as established in Cambridge, Massachusetts.

Correspondence should be addressed to Radcliffe College, Cambridge Massachusetts.

The College buildings are open to visitors interested in the work of the College, both in vacations and in term-time; though students only are admitted to the class-rooms during the hours of lectures.

The Laboratories of Chemistry, Physics, and Botany are in buildings on the grounds.

The Laboratory of Biology occupies quarters in the University Museum in Oxford Street.

The Gymnasium is open to all students without charge.

The Dean and the Secretary may be consulted at Fay House during termtime, and special appointments may be made as required.

The Academic year begins on the Thursday following the last Wednesday in September. In 1909 it is September 30. Students report for registration at 9 A. M. of that day.

The summer vacation begins on the last Tuesday in June, and ends on the last Wednesday in September.

The Christmas recess is from December 23, 1909, to Jan. 2, 1910, inclusive.

The Spring recess is from April 17 to April 23, 1910, inclusive.

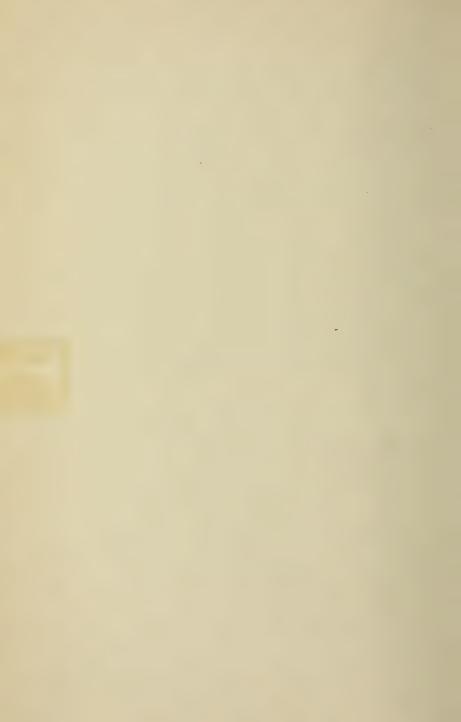
# Radcliffe College.

RADCLIFFE COLLEGE, the successor of the Society for the Collegiate Instruction of Women, offers systematic collegiate instruction of women under the professors and other teachers of Harvard University. More than a hundred instructors of the University are teachers in Radcliffe College.

Fay House, 10 Garden Street, contains the offices and several of the recitation rooms. The other recitation-rooms, the library, and the gymnasium are near Fay House The College has four laboratories, of Physics, Chemistry, Botany, and Biology. The collections of the Museum of Comparative Zoölogy, the Peabody Museum of American Archaeology, the University Museums of Geology, Botany, and Mineralogy, the Semitic Museum, and the Germanic Museum are also open to the students; and, by vote of the President and Fellows of Harvard College, the students have the use of the University Library, containing 500,000 volumes. Opportunities for study in the Astronomical Observatory, the Botanic Garden, and the Herbarium are also afforded.

The requirements for admission are identical with those for admission to Harvard College. The courses of instruction given in Radcliffe College correspond to both "Undergraduate" and "Graduate" courses offered by Harvard University, and are more than sufficient to enable a woman to perform the work required by the University for the degrees of A. B. and A. M. In addition to these, Graduate Students in Radcliffe College have access to a large number of Graduate courses in Harvard University. The examinations are the same in both institutions, and the diplomas conferring the degrees of A. B., A. M., and Ph. D. are countersigned by the President of Harvard University as a guarantee that these degrees are equivalent to the corresponding degrees given by the University.

For provisions for the admission of Special Students and Graduate Students, see pages 33, 34, 35, 36, 37, 38 and 39.



# Associates of Radcliffe College.

EZRA HENRY BAKER, A. B.

MARY LOWELL BARTON

ELIZABETH BRIGGS, A. M.

LE BARON RUSSELL BRIGGS, A. M., LL. D., LITT. D.

WILLIAM ELWOOD BYERLY, PH. D.

ELLA LYMAN CABOT

FREDERICK PICKERING CABOT, A. M., LL. B.

MARY COES, A. M.

MARY HUNTINGTON COOKE

LILIAN HORSFORD FARLOW

FREDERICK PERRY FISH, A. B.

ARTHUR GILMAN, A. M.

STELLA SCOTT GILMAN

GEORGE LINCOLN GOODALE, M. D., LL. D.

WILLIAM WATSON GOODWIN, PH. D., LL. D., D. C. L.

JOHN CHIPMAN GRAY, A. M., LL. B., LL. D.

MABEL EVERETT HARRIS, A. B.

CAROLINE LOUISE HUMPHREY, A. B.

AGNES IRWIN, LITT D., LL. D.

VIRGINIA NEWHALL JOHNSON, A. B

ALICE MARY LONGFELLOW

ELLEN FRANCIS MASON

FANNY PEABODY MASON

JOHN FARWELL MOORS, A. M.

FRANCES PARKMAN

JOHN FORBES PERKINS, A. B., LL. B.

JAMES HARDY ROPES, A. B., D. D.

CLEMENT LAWRENCE SMITH, A. M., LL. D.

EZRA RIPLEY THAYER, A. M., LL. B.

JOSEPH BANGS WARNER, A. M., LL. B.

SARAH YERXA, A. B.

## President

LEBARON RUSSELL BRIGGS

Dean

AGNES IRWIN

Treasurer

EZRA HENRY BAKER

Conneil

LeBaron Russell Briggs, Chairman Agnes Irwin

EZRA HENRY BAKER

WILLIAM ELWOOD BYERLY

Ex officio

EZRA RIPLEY THAYER
JOHN FARWELL MOORS
FRANCES PARKMAN

WILLIAM WATSON GOODWIN
ELLA LYMAN CABOT
FREDERICK PICKERING CABOT

MARY COES

Academic Board

WILLIAM ELWOOD BYERLY, Chairman LEBARON RUSSELL BRIGGS

AGNES IRWIN

EDWARD LAURENS MARK HORATIO STEVENS WHITE BENJAMIN OSGOOD PEIRCE HERBERT WEIR SMYTH FRANK WILLIAM TAUSSIG' ALBERT ANDREW HOWARD GEORGE LYMAN KITTREDGE CHARLES HALL GRANDGENT

Secretary

MARY COES

Nibrarian

Rose Sherman

Mistress of Bertram Hall

ELIZA MASON HOPPIN

Mistress of Grace Bopkinson Eliot Hall

GRACE ELIZABETH MACHADO

Acting Director of the Gymnasium

KATE BOUTELLE WALLACE

# Standing Committees.

The House Committee in charge of buildings, house-service, grounds, and repairs and additions, Miss Irwin, Chairman, Mr. Briggs (ex officio), Mr. Warner, Mr. Baker.

The Students' Committee in charge of the general discipline of the students, oversight of the r homes while in Cambridge and of their amusements, clubs, and social life, Miss Irwin, Chairman, Mrs. Cooke, Miss Coes, Mrs. Cabot, Mrs. Parkman.

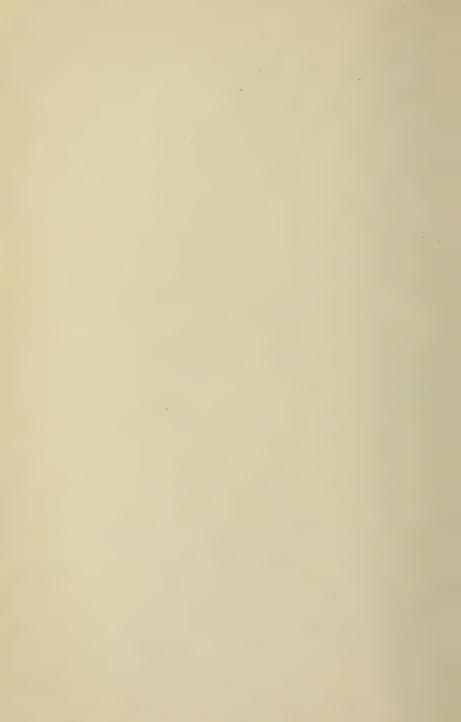
The Library Committee with general supervision of the Library, Mr. Goodwin, Chairman, Mr. Briggs (ex-officio), Miss Irwin, Mrs. Farlow, Miss E. F. Mason.

The Finance Committee in charge of all matters pertaining to Expenditure, Endowment Fund, etc., Mr. Moors, Chairman, Mr. Baker, Mr. Fish, Mr. Gilman.

The Committee on the Gymnasium, Mrs. Farlow, Miss Irwin, Miss Longfellow.

The Committee on the Halls of Residence, MISS IRWIN, Chairman, MISS Humphrey, Mrs. Barton, Miss Hopkinson, Mrs. Parkman, Miss Yerxa.

For the information of school officers and others, the College keeps a list of those students who have received degrees or certificates and wish to find positions as teachers.



# REQUIREMENTS FOR ADMISSION TO RADCLIFFE COLLEGE.

# ADMISSION OF CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS.

The requirements for admission to Radcliffe College are the same as those for admission to Harvard College. Radcliffe College holds no independent entrance examinations, but is authorized to make arrangements by which women may take the Harvard Examinations and have their work submitted to the Harvard Examiners. These examinations may be taken in Cambridge, and in other places in which the Harvard examinations are held in June. The September examinations are held in Cambridge only.\*

Two examinations of candidates for admission will be held in Cambridge in 1909, in Fay House. The days and hours are given in detail on page fifty-three of this pamphlet.

The academic year begins on Thursday, September 30, 1909. All Students register at the Office on that day at nine A. M.

Any one expecting to take admission examinations should register for such examinations on a form which may be obtained from the Secretary. When writing for this form she should say whether she is a Preliminary or a Final Candidate. The Registration Blanks of all candidates who wish to take examinations in June should be properly filled and in the hands of the Secretary by June 10; those of candidates who wish to take examinations in September, by September 10.

Every candidate for admission to Radeliffe College is required to furnish a certificate of honorable dismissal from the school or college which she has attended, or from the tutor with whom she has studied. She must

A fee of five dollars is to be paid by each candidate as often as she applies for examination. For this a receipt will be given, and the amount will be deducted from the first payment for tuition. The fee will not be returned to a candidate who does not enter college.

<sup>\*</sup> For the examinations of the College Entrance Examination Board see page 54.

also refer to two persons from whom information about her may be obtained. References should be sent to the Secretary of the college a month before the examination.

## TERMS OF ADMISSION TO RADCLIFFE COLLEGE.

To be admitted to the Freshman Class of Radcliffe College from a high school, academy, or preparatory school as a candidate for a degree, a student must present herself for examination in certain studies. To each study is assigned a value, expressed in "points," which indicates the relative weight given to that study in determining the question of a candidate's fitness for admission. A total number of 26 points in *prescribed* and *elective* studies is required for admission without conditions. Candidates who fail to meet this requirement in full may be admitted under conditions which are explained below.

## PRESCRIBED STUDIES.

Each candidate for admission is required to present herself for examination in English (4 points), either French (2) or German (2), either Greek and Roman History or English and American History (2), Algebra (2), Plane Geometry (2), and a science or sciences counting 2 points. In addition to these subjects, a candidate must present herself for examination in one Ancient Language — Elementary Greek (4) or Elementary Latin (4).

These studies count 18 points of the total number of 26 required.

#### ELECTIVE STUDIES.

In addition to the studies constituting a candidate's prescribed list, which in points will amount to 18, she is expected to offer, from the list below, studies enough to make the total number of points offered 26. Every candidate is advised, though not required, to include in her list advanced studies counting at least four points.

#### COMPLETE LIST OF ADMISSION STUDIES.

English (4) Music Greek Harmony (2) Elementary Greek (4) Counterpoint (2) Advanced Greek (2) Sciences Latin Physics (2) Elementary Latin (4) Chemistry (2) Advanced Latin (2) Geography (1) Anatomy (1) German Elementary German (2) Astronomy (1) Advanced German (2) Botany (1) French Zoölogy (1) Elementary French (2) Drawing Advanced French (2) Freehand Drawing (1) Projection Drawing (1) History Elementary History (2) Civil Government (1) Advanced History (2) Economics (1) Mathematics Elementary Algebra (2) Advanced Alegbra (1) Plane Geometry (2) Geometry (Plane and Solid) (3) Solid Geometry (1) Logarithms and Trigonometry (1)

Candidates who fail to meet in full the requirements indicated above may be admitted under conditions which require them to do extra college work or to pass certain examinations later. In admitting students with conditions, the Committee on Admission take into account not only the number of examinations or "points" that a student passes but also the quality of her work as shown both by her examinations and by her school record. It is impossible, therefore, to define the requirements for admission with conditions in terms of "points." The requirements for admission without conditions are so defined, but the requirements for admission with conditions vary with individual records. With the evidence afforded by examinations and by school records the Committee on Admission endeavor to consider each case on its merits.

Candidates who are looking forward to the extended study of English or of any other modern literature are advised to acquire a knowledge of Greek as well as of Latin.

For terms of admission to advanced standing, see pages 31, 32, and 33.

## DEFINITIONS OF REQUIREMENTS.

#### GOOD ENGLISH.

Clear and idiomatic English is expected in all examination papers and note-books written by candidates for admission. Teachers are requested to insist on good English, not only in translations, but in every exercise in which the pupil has occasion to write or to speak English.

## 1. English.

A candidate for admission to Radcliffe College may take either of the examinations described below. If she passes English A she is exempt from the prescribed English of the Freshman year (English A); but if she passes it with Grade D she is required to take before the end of her second year a half-course in English Composition in addition to her regular elective courses. Furthermore, on the evidence of her examination book she may be credited with an ungraded mark of "pass in Elementary English," but required to take the prescribed English of the Freshman year.

Candidates who do not intend to anticipate the required English of the Freshman year are advised not to take the examination in Elementary English until the year in which they are to enter College.

## Elementary English.

The examination is intended to test (1) the candidate's ability to write clearly and effectively, and (2) her ability to read literature with accuracy, intelligence, and appreciation.

(1) For the former purpose all the answers on the examination will be considered; and the candidate will be asked to write on one or more of a number of topics drawn from the literature studied in preparation for the examination, from her other studies, and from her own experience. The

examiners will take into account the candidate's spelling, punctuation, use of capital letters, grammatical accuracy, use of words, structure of sentences, paragraphs, and whole compositions, and in general the quality of her English.

(2) For the latter purpose two lists of books are provided, drawn from those named by the Conference on Uniform Entrance Requirements in English, (a) books for reading and practice, and (b) books for study and practice. The books for reading and practice the candidate should read as she reads other books: she is expected to be generally familiar with their contents rather than to know them minutely. The books in the latter group, on the other hand, she should study in such a way that she can answer questions on the subject matter, form, and structure, and can explain allusions and the meaning of unusual words. In connection with the reading and study of the prescribed books the candidate is advised to gain some acquaintance with the periods of literary history to which these books belong, and to commit to memory a considerable amount of English poetry.

The books for reading in 1909 are: -

Group I (two to be selected).

Shakspere's As You Like It, Henry V, Julius Caesar, Merchant of Venice, Twelfth Night.

Group II (one to be selected).

Bacon's Essays; Bunyan's The Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers in the Spectator; Franklin's Autobiography. Group III (one to be selected).

Chaucer's Prologue; Spenser's Faerie Queene (selections); Pope's Rape of the Lock; Goldsmith's Deserted Village; Palgrave's Golden Treasury (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, and Burns.

Group IV (two to be selected).

Goldsmith's Vicar of Wakefield; Scott's Ivanhoe; Scott's Quentin Durward; Hawthorne's House of the Seven Gables; Thackeray's Henry Esmond; Mrs. Gaskell's Cranford; Dickens's Tale of Two Cities; George Eliot's Silas Marner; Blackmore's Lorna Doone.

Group V (two to be selected).

Irving's Sketch Book; Lamb's Essays of Elia; De Quincey's Joan of Arc and English Mail Coach; Carlyle's Heroes and Hero Worship; Emerson's Essays (selected); Ruskin's Sesame and Lilies.

Group VI (two to be selected).

Coleridge's Ancient Mariner; Scott's Lady of the Lake; Byron's Mazeppa and the Prisoner of Chillon; Palgrave's Golden Treasury (First Series), Book IV, with especial attention to Wordsworth, Keats, and Shelley; Macaulay's Lays of Ancient Rome; Poe's Poems; Lowell's Vision of Sir Launfal; Arnold's Sohrab and Rustum; Longfellow's Courtship of Miles Standish; Tennyson's Gareth and Lynette, Lancelot and Elaine, and Passing of Arthur; Browning's Cavalier Tunes, Lost Leade, How They Brought the Good News from Ghent to Aix, Evelyn Hope, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, Boy and the Angel, One Word More, Hervé Riel, Pheidippides.

The books for study in 1909 are:-

Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America, or Washington's Farewell Address and Webster's First Bunker Hill Oration; Macaulay's Life of Johnson, or Carlyle's Essay on Burns.

The books for reading in 1910 are:

Shakspere's Merchant of Venice and Julius Caesar; the Sir Roger de Coverley Papers in the Spectator; Franklin's Autobiography; Macaulay's Lays of Ancient Rome; Scott's Ivanhoe and Lady of the Lake; Tennyson's Gareth and Lynette, Lancelot and Elaine, and Passing of Arthur; Hawthorne's House of the Seven Gables; Dickens's Tale of Two Cities.

The books for study in 1910 are:

Shakspere's Macbeth; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America, or Macaulay's Life of Johnson.

## English A.

The examination will be adapted to the proficiency of those who have studied English composition and literature in a systematic course of three school hours or periods a week for four years. The corresponding course in Harvard College aims to give thorough training in English composition, and to prepare students to write expositions, arguments, and narratives of 1500–2000 words. The examination will include, therefore, besides questions on rhetoric and on literary history from the time of Shakspere,

a composition to which not less than two hours will be allotted on some topic out of a list drawn from English literature, from other studies, and from the candidate's own experience. In this composition the candidate will be expected to show, besides accuracy in spelling, punctuation, grammar, and the use of words, some skill in the use of sentences, clear and firm paragraphing, and command of the principles of structure.

## 2, 3. Greek.

## 2. Elementary Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least two school years. The two parts of the examination cannot be taken separately:—

(a) The translation at sight of simple Attic prose. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) A thorough examination on a prescribed portion of Xenophon (about thirty pages\*), directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Attic prose, involving the use of such words, constructions, and idioms only as occur in the portion of Xenophon prescribed.

The portion of Xenophon prescribed for this examination is the first book of the Anabasis, chapters i-viii. Two years' notice will be given of any change in the selection.

#### 3. Advanced Greek.

The examination will be adapted to the proficiency of those who have studied Greek in a systematic course of five exercises a week, extending through at least *three* school years. The second part of the examination (Greek Composition) is optional, but candidates are advised to try this part of the paper, since a fair translation will offset deficiencies in the preceding part.

(a) The translation at sight of Attic prose and of Homer, with questions designed to test the candidate's understanding of the passages set, and

<sup>\*</sup> The pages of the more recent Teubner text editions are taken as a standard in this statement.

questions on ordinary forms, constructions, and idioms, and on prosody. There will also be questions on the Homeric poems and Homeric life. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into Attic prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Greek prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the elementary and advanced examinations in Greek is based on the assumption that the candidate has begun the study of Latin at least a year earlier, and has continued it along with her Greek course; otherwise the periods specified would not be sufficient.

In preparation for the elementary examination in Greek, candidates should read from 130 to 170 pages \* of Attic prose. For the advanced examination candidates should read from 30 to 50 pages more of Attic prose, and from 3000 to 5000 verses of Homer. The reading of Homer may be advantageously begun with a thorough study of Iliad, Books I and II (to the catalogue of ships).

The pupil should be constantly guided in proper methods of reading, and trained to read the Greek intelligently, as Greek, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Greek, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the examination in Greek Composition, pupils should be trained, from an early stage of the preparatory course, to render into Greek, not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

## 4, 5. Latin.

## 4. Elementary Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending

<sup>\*</sup> The pages of the more recent Teubner text editions are taken as a standard in this statement.

through at least three school years. The passages set for translation must be rendered into simple and idiomatic English. The three parts of the examination cannot be taken separately:—

- (a) The translation at sight of simple Latin prose.
- (b) An examination (which may include translation) on the first four books of Virgil's Aeneid, or on selected myths from Ovid's Metamorphoses, or on selected speeches of Cicero, with questions on the subject-matter and on literary and historical allusions. Two years' notice will be given of any change in these alternative requirements.
- (c) An examination directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose.

## 5. Advanced Latin.

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *jour* school years. The passages set for translation must be rendered into simple and idiomatic English. The two parts of the examination cannot be taken separately:—

- (a) The translation at sight of Latin prose and verse, with questions on ordinary forms, constructions, and idioms, and on prosedy.
- (b) The translation into Latin prose of a short passage of connected English narrative. (The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for College, and will be limited to the subject-matter of those works.)

The estimate of the periods of study necessary to prepare for the examinations in Latin is made with reference to schools which have a four years' course. Schools which have a five years' course may more advantageously provide for beginning the study of Latin in the first year, with some diminution, if necessary, of the time devoted to it in the last years of the course.

The course of reading pursued in preparation for the examinations in Latin should include: —

- (a) Easy reading, included in or following a suitable introductory book ('Latin Lessons'), amounting to from 30 to 40 pages; \*
  - (b) Nepos (Lives) and Caesar (Gallic War), 90 to 120 pages;
- (c) Cicero, 90 to 120 pages, including the speech on the Manilian Law, the four speeches against Catiline, the Defence of Archias, and the Defence of Marcellus, with additional speeches selected by the teacher;
- (d) Virgil and Ovid, 6000 to 10,000 verses, including the first six books of the Aeneid.

Preparation for the elementary examination alone should include (a) and (b), about 40 pages of Cicero, and either the first four books of Virgil's Aeneid, or the Speeches of Cicero on the Manilian Law, Catiline, Archias, and Marcellus, or the following myths from Ovid's Metamorphoses: Deucalion, Daphne, Phaethon, Cadmus, Pyramus, Andromeda, Proserpina, Niobe, Medea, Meleager, Philemon, Atalanta, Midas, Alcyone, Galatea.

The pupil should be constantly guided in proper methods of reading, and trained to read the Latin intelligently, as Latin, before undertaking to render it into idiomatic English. There should be constant practice in reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Latin, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the advanced examinations in Latin Composition, pupils should be trained, from an early stage of the preparatory course, to render into Latin not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

## 6, 7. German.

## 6. Elementary German.

- (a) The translation at sight of simple German prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into German of simple English sentences, or of easy connected prose, to test the candidate's familiarity with elementary grammar.

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than two hundred pages of easy German (including reading at sight in class).

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugation of the weak and the more usual strong verbs; the declension of articles, adjectives, pronouns, and such nouns as are readily classified; the commoner prepositions; the simpler uses of the modal auxiliaries; the elements of syntax, especially the rules governing the order of words.

Pronunciation should be carefully taught, and the pupils should have frequent opportunities to hear German spoken or read aloud. The writing of German from dictation is recommended as a useful exercise.

#### 7. Advanced German.

(a) The translation at sight of ordinary German. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into German of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of those who have read, in addition to the amount specified under Elementary German, not less than five hundred pages of classical and contemporary prose and verse. It is recommended that the reading be selected from such works as the following: Riehl, Culturgeschichtliche Novellen; Freytag, Bilder aus der deutschen Vergangenheit, Die Journalisten; Kohlrausch, Das Jahr 1813; Schiller, Der dreissigjährige Krieg, Wilhelm Tell, Maria Stuart, Die Jungfrau von Orleans; Goethe, Hermann und Dorothea, Egmont, Iphigenie; Lessing, Minna von Barnhelm. About one half of the amount read should be Nineteenth Century prose.

In the translation into German candidates will be expected to show a thorough knowledge of accidence, the elements of word-formation, the principal uses of prepositions and conjunctions and the essentials of syntax, especially the uses of the modal auxiliaries, and of the subjunctive and infinitive modes.

It is recommended that the candidate be trained to follow a recitation conducted in German and to answer in that language questions asked by the instructor.

## 8, 9. French.

## 8. Elementary French.

- (a) The translation at sight of ordinary Nineteenth Century prose. (The passages set for translation must be rendered into simple and idiomatic English.)
- (b) The translation into French of simple English sentences or of easy connected prose, to test the candidate's familiarity with elementary grammar. Proficiency in grammar may also be tested by direct questions, based on the passages set for translation under (a).

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than four hundred pages (including reading at sight in class) from the works of at least three different authors. It is desirable that a portion of the reading should be from works other than works of fiction.

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understand-

ing of the language. The requirement in elementary grammar includes the conjugations of regular verbs, of the more frequent irregular verbs, such as aller, envoyer, tenir, pouvoir, voir, vouloir, dire, savoir, faire, and those belonging to the classes represented by ouvrir, dormir, connaître, conduire, and craindre; the forms and positions of personal pronouns and of possessive, demonstrative, and interrogative adjectives; the inflection of nouns and adjectives for gender and number, except rare cases; the uses of articles, and the partitive constructions.

Pronunciation should be carefully taught, and pupils should have frequent opportunities to hear French spoken or read aloud. The writing of French from dictation is recommended as a useful exercise.

## 9. Advanced French.

(a) The translation at sight of standard French. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into French of a connected passage of English prose, to test the candidate's familiarity with grammar. Proficiency in grammar may also be tested by direct questions.

The passages set for translation into English will be suited to the proficiency of candidates who have read, in addition to the amount specified under Elementary French, not less than six hundred pages of prose and verse from the writings of at least four standard authors. A considerable part of the amount read should be carefully translated into idiomatic English.

Candidates will be expected to show a thorough knowledge of accidence and familiarity with the essentials of French syntax, especially the uses of tenses, modes, prepositions, and conjunctions.

It is recommended that the candidate be trained to follow a recitation conducted in French and to answer in that language questions asked by the instructor.

## 10, 11. History (including Historical Geography).

## 10. Elementary History.

Either of the two following groups, each including two fields of historical study: —

1. Greek and Roman History.— (a) Greek History to the death of Alexander, with due reference to Greek life, literature, and art. (b) Roman History to the accession of Commodus, with due reference to literature and government.

2. English and American History.—(a) English History, with due reference to social and political development. (b) American History, with the elements of Civil Government.

For preparation in each of the two historical fields presented, a course of study equivalent to at least three lessons a week for one year will be necessary.

The candidate will be expected to show on examination such general knowledge of each field as may be acquired from the study of an accurate text-book of not less than 300 pages, supplemented by suitable parallel readings amounting to not less than 500 pages. The examination will call for comparison of historical characters, periods, and events, and in general for the exercise of judgment as well as of memory. Geographical knowledge will be tested by means of an outline map.

In the judgment of the Department of History it is desirable that Greek and Roman History be offered as a part of the preparation of every candidate.

## 11. Advanced History.

Any one of the four courses of study which follow: -

- 1. Greek History to the destruction of Corinth and Roman History to the death of Constantine (open to those candidates only who have offered English and American History as an elementary study).
- 2. English History (open to those candidates only who have offered Greek and Roman History as an elémentary study).
- 3. American History (open to those candidates only who have offered Greek and Roman History as an elementary study).
- 4. European History from the Germanic conquests to the beginning of the Seventeenth Century.

In every case the candidate will be expected to show on examination such an acquaintance with the whole field as may be gained from the study of good text-books, together with substantial parallel readings, and, further, such a detailed knowledge of some part of the field as may be gained from suitable topical study. A higher standard of acquirement and of power to combine results will be expected than in the elementary requirement.

As further evidence of the candidate's proficiency satisfactory written work, done at school and certified by the teacher, must be submitted at the time of the examination. It must be presented in the form of a notebook (or bound collection of notes), containing not less than 50 written

pages on each historical field offered, and must show practice in some of the following exercises:—

- (a) Notes and digests of the pupil's reading outside of the text-books.
- (b) Brief written tests requiring the application to new questions of knowledge previously acquired.
  - (c) Parallels between historical characters or periods.
- (d) Short studies of topics limited in scope, prepared outside of the classroom and illustrated by some reference to contemporary material.
- (e) Historical maps or charts showing explorations, migrations, conquests, territorial changes, or social conditions.

## 12, 13. Music.

## 12. Harmony.

The examination will be adapted to the proficiency of those who have studied Harmony in a systematic course of three lessons a week through one school year, who are proficient in pianoforte playing, and who have the ability to read chorals and moderately easy piano pieces at sight.

The examination will test

- I. The accuracy of the candidate's knowledge of the following points:
- a. Notation; Clefs; Signatures; Diatonic and Chromatic Intervals and their inversions; Consonance and Dissonance; Major and Minor diatonic scales; Chromatic Scale; Natural Harmonic Series.
  - b. Triads of the Major and Minor modes.
- c. Rules of Chord-connection; Range of voices; Open and Close harmony; Tonality.
- d. Inversions of Triads; Principles of doubling voices in chords, especially in successive Sixth-chords.
- e. Chords of the Dominant Seventh, and Diminished Seventh; Preparation and Resolution.
  - f. Secondary Seventh-chords.
  - g. Principles of key-relationship; Simple modulation.
- II. Her analytical knowledge of ninth chords, altered chords (including augmented chords), non-harmonic tones, suspensions, and pedal point. (Students should be encouraged to apply this knowledge in their harmonization).

Preparation for this examination should consist of systematic practice in the harmonization of simple melodies in soprano and in bass. All exercises should be written in a clear and well-formed notation. *Modern Harmony*, by Foote and Spalding, is used in the College Course corresponding to this requirement, and is recommended for use in preparation for the examination.

## 13. Counterpoint.

The examination will be adapted to the proficiency of those who have studied Counterpoint in a systematic course of three lessons a week through one school year, and presupposes training in pianoforte playing. As counterpoint applies the principles of harmony to the melodious treatment of the several voice-parts in combination, and as the art of musical composition begins properly with this study, the work should consist principally of written exercises on given themes, in the following order:—Chorals and melodies harmonized, with a free use of passing notes; the several orders of Counterpoint in two, three, and four voices, with and without cantus firmus; Double Counterpoint; Free Imitative Counterpoint; Analysis of the Two-part Inventions and Fugues of Sebastian Bach; Simple forms of free composition, Organ Preludes, Two-part inventions, and Part Songs.

Students should use as models simple organ compositions and part-songs of modern composers. For the exercises in counterpoint the alto and tenor clefs should be used.

## 14, 17. Mathematics.

A thorough practical acquaintance with ordinary Arithmetic is assumed as underlying all preparation in Mathematics. Knowledge of the fundamental principles of Arithmetic and careful training in accurate computation with whole numbers and with vulgar and decimal fractions form an essential part of early school work. But the pupil's time should not be wasted in the solution by arithmetic of puzzling problems which properly belong to algebra, or in complicated and useless reductions, or in the details of commercial arithmetic. It is desirable that some familiarity with algebraic expressions and symbols, including the methods of solving simple equations, be acquired in connection with the course in Arithmetic.

## Elementary Mathematics.

14. Elementary Algebra.—Algebra, through Quadratic Equations. The requirement in Algebra includes the following subjects: factors, common divisors and multiples, fractions ratios and proportions; negative

quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem for positive integral powers of the binomial, and the extraction of roots; arithmetical and geometrical progressions; putting questions into equations and the reduction of equations; the ordinary methods of elimination and the solution of both numerical and literal equations of the first and second degrees with one or more unknown quantities and of problems leading to such equations.

The student should cover carefully the whole ground here specified, and should acquire a thorough understanding not only of the practice, but of the reasons involved in the elementary algebraic rules; for example, in the rules of multiplication, of signs, and of exponents, in the rules for fractions, and in those relating to the reduction and solution of equations. She should train herself to practical skill by the solution of a large number of examples, and should learn to do her work with reasonable quickness, as well as with confidence, accuracy, and clearness. The solution of fairly complicated literal quadratics, the various methods of elimination for equations of the first two degrees, the putting of problems in a neat manner into equations, and the working of the various algebraic operations both for integral and fractional expressions may be mentioned as important subjects of attention. The student should be taught to arrange her work in a clear, orderly, and compact fashion.

The time supposed to be devoted to the systematic study of the requirement in Algebra is the equivalent of a course of three lessons a week through two school years.

15. Geometry.— Plane and Solid Geometry, including problems in mensuration of plane and solid figures, and original propositions in Plane Geometry.

Geometric education should begin in the kindergarten or primary school, where the child should acquire familiarity through the senses with simple geometric forms, by inspecting, drawing, modelling, and measuring them, and noting their more obvious relations. This study should be followed, in the grammar school, by systematic instruction in Concrete (or Observational) Geometry, of which geometric drawing should form a part. Such instruction should include the main facts of Plane and Solid Geometry, treated as matters of observation, and not as exercises in logical deduction, without however necessarily excluding the beginnings of deductive proof as soon as the pupil is ready for them. Concrete Geometry is believed to have important educational value, and to prepare an excellent founda-

tion for the later study of Formal Geometry. It belongs, however, to the earlier stages of school work, and should not be postponed until the time that belongs to direct preparation for college.

In teaching Formal Geometry, stress should be laid from the outset on accuracy of statement and elegance of form, as well as on clear and strict reasoning. As soon as the pupil has begun to acquire the art of rigorous demonstration, her work should cease to be merely receptive, she should be trained to devise constructions and demonstrations for herself, and this training should be carried through the whole of the work in Plane Geometry. Teachers are advised, in their selection of a text-book, to choose one having a clear tendency to call out the pupil's own powers of thought, prevent the formation of mechanical habits of study, and encourage the concentration of mind which it is a part of the discipline of mathematical study to foster. The subject of Geometry, not a particular treatise, is what the pupil should be set to learn; and its simpler methods and conceptions should be made a part of her habitual and instinctive thought. Lastly, the pupil should be stimulated to good work by interest in the study felt and exhibited by the teacher.

The requirement in Geometry embraces the following topics: the general properties of plane rectilinear figures; the circle and the measure of angles; similar polygons; areas; regular polygons, and the measure of the circle; the relations of planes and lines in space; the properties and measure of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle. The propositions required under these several heads are those only which are contained in the older treatises, and which are recognized as constituting the Elements of Geometry. The examination does not include the additions introduced into some recent text-books, although most of those additions are in themselves valuable for the student who has time and taste for extra study in this field. A syllabus of the required propositions has been prepared. [This syllabus may be obtained, price 10 cents, at the Publication Office, 2 University Hall, Cambridge.]

The examination in Geometry also includes original propositions in Plane Geometry, based on the propositions named in the syllabus, and problems in mensuration in both Plane and Solid Geometry; but excellence in bookwork and in exercises immediately illustrating bookwork will be allowed to offset in part any lack of skill in original work.

The time which it is recommended to assign to the systematic study of the requirement in Formal Geometry is the equivalent of a course of five lessons a week for one school year; but it is believed to be advisable to extend this allowance of time over two years.

## 15a. Plane Geometry.

The requirement in Plane Geometry is stated on pages 1-14 of the Syllabus mentioned above.

## Advanced Mathematics.

- 15b. Solid Geometry.— Chauvenet's Geometry, Revised and Abridged (Philadelphia: J. B. Lippincott & Co.), Books VI, VII, VIII, and IX, will serve to indicate the nature and amount of the requirement in Solid Geometry.
- 16. Logarithms and Trigonometry.— The theory of logarithms and the use of logarithmic tables.— Plane trigonometry.— The solution of the right spherical triangle.— Applications to simple problems.

No technical knowledge of the subjects of surveying and navigation, such, for instance, as the methods of parallel or middle latitude sailing, will be required, but such terms as latitude, longitude, angle of elevation or depression, bearing, etc., should be understood. At the examination, candidates are furnished with four-place tables belonging to the University, and are not allowed to use their own tables. Two sets of tables will be provided: (1) The regular Sexagesimal tables\*; (2) a set of tables in which the degree is divided into tenths and hundredths instead of into minutes and seconds.† The questions will be so worded that the candidate may use, with equal facility, whichever set of tables she prefers. The tables provided are distributed before the hour of examination, so that candidates may have at least an hour for becoming acquainted with their arrangement and use. Teachers who wish a still earlier opportunity of seeing these tables should write to the Secretary of Radcliffe College.

## 17. Advanced Algebra.

The requirement in Advanced Algebra includes the following subjects:

(a) Simultaneous quadratics and equations solved like quadratics; properties of quadratic equations; addition, subtraction, multiplication and division of complex quantities; inequalities; variations; arithmetical and geometrical progressions; mathematical induction; simple problems in choice and chance; continued fractions; scales of notation.

<sup>\*</sup>Special reprints from pages 2-5, 8-15, of J. M. Peirce's "Four-Place Tables (Ginn & Co., Boston), not obtainable separately.

<sup>†&</sup>quot;Four-Place Tables" abridged edition, compiled by E. V. Huntington (price, thirty-five cents, for sale by the Harvard Coöperative Society).

(b) Determinants, not including the multiplication theorem; simple applications of determinants to linear equations; the solution of numerical equations of higher degree, and so much of the theory of equations (not including multiple roots or Sturm's theorem) as is necessary for this purpose.

The topics included under (a) may be treated briefly. About half the time devoted to the requirements should be spent on the topics included

under (b).

## 18-22. Physical Science. \*

## Elementary Physical Science.

18. Elementary Physics.—A course of study dealing with the leading elementary facts and principles of physics, with quantitative laboratory work by the pupil.

The instruction given in this course should include qualitative lecture-room experiments, and should direct especial attention to the illustrations and applications of physical laws to be found in every-day life. The candidate is required to pass a written examination, the main object of which will be to determine how much she has profited by such instruction. This examination may include numerical problems. It will contain more questions than any one candidate is expected to answer, in order to make allowance for a considerable diversity of instruction in different schools.

The pupil's laboratory work should give practice in the observation and explanation of physical phenomena, some familiarity with methods of measurement, and some training of the hand and the eye in the direction of precision and skill. It should also be regarded as a means of fixing in the mind of the pupil a considerable variety of facts and principles. The candidate is required to pass a laboratory examination, the main object of which will be to determine how much she has profited by such a laboratory course.

The candidate must name as the basis for her laboratory examination at least thirty-five exercises selected from a list of about sixty, described in a publication issued by Harvard University under the title, "Descriptive List of Elementary Exercises in Physics." [This list may be obtained, price 40 cents, at the Publication Office, 2 University Hall, Cambridge.] In this list the divisions are mechanics (including hydrostatics), light, heat, sound, and

<sup>\*</sup>For rules relating to the time of handing in note-books and to candidates examined in June in places where no laboratory examination is provided, see p. 30.

electricity (with magnetism). At least ten of the exercises selected must be in mechanics. Any one of the four other divisions may be omitted altogether, but each of the three remaining divisions must be represented by at least three exercises.

The candidate is required to present a note-book in which she has recorded the steps and the results of her laboratory exercises, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes. These exercises need not be the same as those upon which the candidate presents herself for the laboratory examination, but should be equivalent to them in amount and grade of quantitative work.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in physics. Experience has shown that pupils can make the original record of their observations entirely presentable, so that copying will be unnecessary, and they should in general be required to do so.

This course, if taken in the last year of the candidate's preparation, is expected to occupy in laboratory work, recitations, and lectures, five of the ordinary school periods, about fifty minutes in length, per week for the whole year. With few exceptions exercises like those in the Descriptive List already mentioned can be performed in a single school period, but for satisfactory results it will often be necessary to repeat an exercise. Two periods per week for the year should be sufficient for the laboratory work proper. If the course is begun much earlier than the last year of the candidate's preparation, as it well may be, it will require more time.

19. Chemistry.\*—A course of at least sixty experiments, performed at school by the pupil and accompanied with systematic instruction in principles and their applications, in accordance with directions given in a pamphlet entitled "An Outline of Requirements in Chemistry," issued by Harvard University for the use of teachers only.

The candidate is required to pass both a written and a laboratory exam-

<sup>\*</sup> The course will be mainly an experimental course in theoretical chemistry, but there will be experiments covering all branches of pure chemistry.

ination. The written examination will test her acquaintance with the facts and principles of Chemistry. The laboratory examination will test both her skill in performing experiments and her grasp of the principles involved in them. The candidate is further required to present the original note-book in which she recorded the steps and results of the experiments which she performed at school, and this note-book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that her work has been of such a character as to raise a presumption in favor of her preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in Chemistry.

- **20.** Geography.—A course of study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Geography," issued by Harvard University.
- 21. Anatomy, Physiology, and Hygiene.— A course of study and laboratory work equivalent to that described in a pamphlet entitled "An Outline of Requirements in Anatomy, Physiology, and Hygiene," issued by Harvard University.

The candidate will be required to pass both a written and a laboratory examination. The written examination will test the range and thoroughness of her knowledge of the elements of Anatomy, Physiology, and Hygiene. The laboratory examination will test (a) her ability to perform the experiments described in the Outline of Requirements, and (b) her knowledge of the first aids to be rendered to the injured.

At the time of the laboratory examination the candidate must present the original note-book containing (with dates) the notes and drawings she has made in the course of her laboratory work, and bearing the endorsement of her teacher, certifying that the book is a true record of the pupil's own observations and experiments. An index of subjects should be appended.

**22.** Astronomy.—A course of observational study equivalent to that described in a pamphlet entitled "An Outline of Requirements in Astronomy," issued by Harvard University.

This course requires a knowledge of Geometry.

In Astronomy, the candidate will be required to take both a written and a laboratory or practical examination. The written examination may test her understanding of observational methods appropriate to the subject, but will call chiefly for a knowledge of facts and principles. The laboratory or practical examination will test her skill in observation as well as her grasp of principles. This examination can be taken in Cambridge only; for those who are examined elsewhere in June, it will be postponed to September.

The practical examination in Astronomy may call for an ability to make simple naked-eye and instrumental observations, and to establish the simpler generalizations of astronomy by discussion of these observations.

The candidate in these subjects will be required to present, at the time of the laboratory or practical examination, the original note-book in which she recorded, with dates, the steps and results of the observations which she made at school. This book must bear the endorsement of her teacher, certifying that the notes are a true record of the pupil's work. An index of subjects should be appended. The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of her work through an extended course of observational study, and that her work has been of a satisfactory character; but greater weight will be given to the practical or laboratory examination than to the note-book in determining the candidate's attainments.

## 23, 24. Botany and Zoölogy.

- 23. Botany.—A course of study and laboratory work equivalent to that indicated in an "Outline of Requirements in Botany," issued by Harvard University. The course should extend through at least half of a school year, with five lessons a week. The laboratory work is to be directed especially to the external anatomy and the activities of our common plants.
- 24. Zoölogy.— A course of study and laboratory work equivalent to that described in a pamphlet entitled "An Outline of Requirements in Zoölogy," issued by Harvard University. The course should extend through at least half of a school year, with five lessons a week, and should include the laboratory study of at least ten types of animals, with special reference to their external anatomy and their activities. These types are to be selected in accordance with directions to be given in the pamphlet named.

In Botany and in Zoölogy the candidate will be required to pass both a

written and a laboratory examination. The written examination will test the range and thoroughness of her knowledge of the subject. The laboratory examination will test her skill in observation and experimentation, and her ability to apply names properly to the parts of the organisms studied.\*

At the time of the laboratory examination the candidate must present the original note-book containing (with dates) the notes and drawings she has made in the course of her laboratory work, and bearing the endorsement of her teacher, certifying that the book is a true record of the pupil's own observations and experiments. An index of subjects should be appended.

## 25, 26. Drawing.

A course of drawing, in either or both of the following branches, equivalent to that described in an "Outline of Requirements in Drawing," issued by Harvard University:—

25. Freehand Drawing.—The representation of simple objects, in outline and with shading.

Accuracy of delineation, correctness of proportion, and good quality of line are desired rather than any attempt at elaboration. The aim should be to express as much as possible with the fewest lines. The examination will consist of the drawing, first, of a group of geometrical solids, and, second, of either a simple piece of machinery or a simple piece of architectural ornament (such as a Greek anthemion), as the candidate may elect. Every candidate is further required to present a set of plates or drawings made by her at school, showing that she has completed a thorough course in this subject; and these drawings must be accompanied by the certificate of her teacher stating that they are the pupil's own work.

**26.** Projection Drawing.— The projection in plan and elevation of geometrical figures and of simple parts of architectural subjects or machinery.

The examination will test the candidate's knowledge of principles and methods. Every candidate is expected to bring to the examination the ordinary drawing instruments and lead-pencils; drawing-board and paper will be supplied. Every candidate is further required to present a set of plates or drawings prepared by her at school, sufficient to demonstrate her understanding of the subject and her familiarity with instruments, including the use of the right-line pen; and these drawings must be accom-

<sup>\*</sup> For rules relating to laboratory examinations and note-books, see page 30.

panied by the certificate of her teacher stating that they are the pupil's own work.

## 27, 28. Government and Economics.

27. Civil Government.— Civil Government in the United States (national, state, and local); its constitution, organization, and actual working.

The candidate will be expected to show, on examination, such general knowledge of the field as may be acquired from the study of a good text-book of not less than three hundred pages, supplemented by collateral reading, and discussion. The examination will call for familiarity with constitutional questions and with the procedure of legislative bodies.

For preparation in this subject, a course of study equivalent to at least three lessons a week for one year will be necessary.

#### 28. Economics:—

The candidate will be expected to show, on examination, a knowledge of the leading facts and principles of Economics, including such subjects as division of labor, the factors of production, the laws of diminishing returns, demand and supply, value and price, wages, interest, rent and profits, credit, and international trade. For this part of the study one of the better grade of manuals in current use will serve as a basis, but it must be supplemented with collateral reading, discussion, and practical exercises. In addition to the study of principles, the student will be expected to have acquired a fair knowledge of elementary banking operations, and of the banking and monetary history of the United States since 1860.

For preparation in this subject, a course of study equivalent to at least three lessons a week for one year will be necessary.

## LABORATORY EXAMINATIONS.

A candidate who is examined in any study in which a laboratory examination is held will hand in her laboratory note-book at the hour of the laboratory examination. Laboratory note-books will be deposited, after examination, in the Secretary's office, where they will be kept for a reasonable time, subject to the order of the owners.

A candidate examined in June at any place where a laboratory examination is not provided will be required to take such an examination in Cambridge in the autumn of the year in which she enters College; but if she passes the written examination in June, the subject will be temporarily counted in her favor in determining the question of her admission to College.

#### EXAMINATION PAPERS.

A set of recent examination papers will be sent free to any address, on application to the Publication Agent of Harvard University, 2 University Hall, Cambridge.

Separate papers may be had in quantities of not less than six copies of any one paper (not one each of six different papers) at ten cents a dozen.

## CERTIFICATES.

The College does not accept certificates of secondary schools in place of entrance examinations. The testimony of teachers is, however, highly valued and is given special consideration in all cases in which the evidence of examinations appears inconclusive. On the receipt of each application for admission a blank form will be sent to the headmaster of the school, requesting the candidate's record and any facts about her character and scholarship which will be helpful to the Committee on Admission.

## CERTIFICATES FOR PRELIMINARY EXAMINATIONS.

A Preliminary examination is an examination taken at any period (June or September) antecedent to the Final examination at which the candidate completes her admission record. If a candidate divides her examinations among several periods, those of every period except the last are Preliminary. At each registration for Preliminary examinations the candidate must present a certificate from her school or tutor, naming the subjects in which she is recommended. A candidate passing Preliminary examinations will be credited only with those subjects in which she is recommended.

#### CERTIFICATES OF HONORABLE DISMISSAL.

Every candidate for admission is required to furnish a certificate of honorable dismissal from the school or college she has attended, or from the tutor with whom she has studied. If a candidate has within a year left one school for another, or for a private tutor, any certificate received from the second school or private tutor must be accompanied by the written consent of the principal of the first school.

## OPTIONAL EXAMINATIONS AND ADMISSION TO ADVANCED STANDING.

Students may be admitted to advanced standing either (a) by examination, or (b) from other colleges without examination.

## ANTICIPATION OF COLLEGE STUDIES BY EXAMINATION.

Students who have extended their studies beyond the requirements for admission may present themselves for additional examinations in (a) the prescribed studies of the Freshman year, and (b) in any elective course or courses intended primarily for undergraduates, provided the courses are of such a character that they may properly be anticipated by examination.

## Examinations in Prescribed Freshman Studies.

- 1. English.— The examination in English A.
- 2. German or French (whichever the student did not offer for admission.)

The admission examinations in Elementary German and Elementary French. Students who wish to anticipate the prescribed German or French of the Freshman year by means of these examinations must give notice in advance, and must attain a satisfactory grade (C or higher) in their examination to count the subject anticipated in the reduction of the number of courses they must take in College.

#### Examinations in Elective Studies.

In June, 1909, certain admission studies will be regarded as the equivalents of certain College courses,\* and students may anticipate these courses by the corresponding admission examinations, provided they give notice in advance that they offer the examinations as the equivalents of College courses and provided they attain a satisfactory grade (C or higher) in the examinations.

After June, 1909, no elective courses may be anticipated by admission examinations. Students who wish to anticipate by examination the work of elective courses must secure permission to take anticipatory examinations in specific College courses. Examinations when given will correspond in length and character to regular College examinations.

Examinations in elective studies that do not correspond to admission

<sup>\*</sup> The following are the College courses to which admission studies correspond: Elementary German corresponds to German A, Elementary French to French A, Elementary Physics to Physics B, Harmony to Music 1, Advanced German to German 1a, Advanced French to French 1a, Solid Geometry to Mathematics E, Advanced Algebra to Mathematics D, Counterpoint to Music 2.

studies will be held in June and in the first fortnight of the academic year. Requests to be allowed to take such examinations must be in the hands of the Secretary not later than June 1 or September 10.

#### ADMISSION FROM OTHER COLLEGES.

Students who have completed creditably the work of at least one year at other colleges may be admitted without examination to the standing for which their previous training seems to qualify them.

Every person wishing to enter under this provision must make a complete written statement of the work on which she bases her application. Blank forms of application for admission may be obtained from the Secretary.

Much importance is attached to the quality of the work offered. The applicant should furnish: (1) official statements of her rank or grade in her various college studies: (2) letters, or other evidence, showing the opinion her instructors have formed of her character and scholarship: (3) a letter of honorable dismissal from the college whence she comes.

#### SPECIAL STUDENTS.

Applicants who pass a satisfactory examination on a smaller number of subjects than are called for in the full Requirements may be admitted, at the discretion of the Academic Board, to such special courses as they seem qualified to pursue.

Students of mature age, who wish to pursue chiefly higher courses of study, may be admitted, at the discretion of the Academic Board, without passing the examination for admission, provided that they satisfy the instructors in the courses which they elect of their fitness to pursue them.

Every special student is expected to take four courses of study.

Special students may, on application, receive, at the end of their term of study, certificates stating the courses in which they have passed satisfactory examinations, and giving the grade to which they have been assigned in each course.

Special students should make application before the first day of September.

## STUDENTS AND EXAMINATIONS.

Undergraduates are expected to make their choice of elective studies before the first day of September, and no changes are allowed after October 1, except by leave of the Academic Board. Applications for changes must be made to the Academic Board in writing, with a statement of reasons.

The student's choice is limited to those studies which her previous training qualifies her to pursue; and she must observe any restrictions that may be attached to the particular courses she wishes to select. She is further required to avoid any conflict of recitation hours or of examinations between her courses.

No starred (\*) course may be chosen without the *previous* consent of the Instructor. Application should be made, if possible, before the summer vacation.

An undergraduate who wishes to take a Graduate course is required to consult the Instructor in advance; if possible she should do this before the summer vacation. She will be admitted to the course on the recommendation of the Instructor, which must be given in writing.

Not more than one Course of Research may be taken in any year by an undergraduate.

All students are expected to attend all the exercises and to pass all the examinations in the courses which they elect, unless excused by special vote of the Academic Board. Applications for excuses must be made to the Secretary in writing with the reasons.

#### LODGINGS FOR STUDENTS.

Students may learn of lodging-places approved by the Students' Committee by enquiring of the Dean. The ladies of the Standing Committees will be glad to assist students by their advice.

The two halls, Bertram Hall and Grace Hopkinson Eliot Hall, are situated on Shepard Street, seven minutes' walk from the College. Bertram Hall, under the charge of a resident mistress, Miss E. M. Hoppin, accommodates twenty-five students; Grace Hopkinson Eliot Hall, under the charge of Miss Grace E. Machado, forty-three students. The rooms are furnished. The price of board is \$216 a year, \$6 a week for the thirty-six weeks from the last Wednesday in September to the day before Rad-

cliffe Class Day, exclusive of the Christmas and the Spring recess, as fixed by the College catalogue. Students may remain at an extra charge of \$10 for the Christmas recess, \$7 for the Spring recess, \$6 for the week ending the day after Radcliffe Commencement, or \$1.50 a night. The charges for rooms vary from \$54 each to \$325 for a study and bedroom. These charges include all expenses for furnishing, service, heating and light. Applications for rooms should be made to Miss Caroline L. Humphrey, Radcliffe College, before May 1, as assignments are made during the month of May, but they will be considered later as vacancies may occur. Every application must be accompanied by a deposit with the Treasurer, Caroline L. Humphrey, of \$15; otherwise the application will not be registered. Further details are given in a special leaflet describing the halls of residence.

All arrangements for boarding and lodging are to be subject to the approval of the Dean.

Any change of address must be at once reported to the Dean and to the Secretary.

## GRADUATE STUDENTS.

#### Admission.

Bachelors of Arts of Radcliffe College, and Graduates of other Colleges of good standing who present satisfactory evidence of character and qualifications, are admitted without examination as Graduate Students in Radcliffe College.

An application for admission may be made by filling out a registration blank and depositing it at the office. If the applicant is not a graduate of Radeliffe College, she must also file, for the consideration of the Academic Board, satisfactory certificates of scholarship and character; and if she holds a degree from any institution, she must present diplomas or official certificates, sufficient to furnish evidence of her holding such degree or degrees.

Admission as a Graduate Student does not imply admission to candidacy for a Degree.

Graduate Students, not Bachelors of Arts of Radcliffe College, who wish to become candidates for any degree, should make early application, at the beginning of the Academic Year if possible, in order to learn the conditions under which they may be accepted as qualified for candidacy.

#### RESIDENCE.

Graduate Students are required to be in regular attendance on the exercises in some course or courses of instruction, and to do all the required work (including all examinations) in the courses which they elect; or to carry on regular work in some Laboratory or Museum or in the Library, under the frequent inspection and criticism of some specified instructor or instructors.

#### STUDIES.

The instruction open to students in Radcliffe College is arranged in one list of Courses of Instruction, consisting of Full Courses and Half-Courses. These are distributed into *three groups* in the several branches of study, namely,

- (1) Courses designed primarily for Undergraduates.
- (2) Courses for Graduates and Undergraduates.
- (3) Courses primarily for Graduates.

Any course (or half-course) in the list is open to all Graduate Students who present sufficient evidence of qualification for that course. It is sometimes advisable, and is not unusual, for a graduate student to choose some of her studies from the First, or Undergraduate, Group; but such studies are not ordinarily counted for the degree of A. M. Many of the studies of the Second Group are distinctly of Graduate grade, in the sense of being in advance of such as are ordinarily pursued for a Bachelor's degree. They are thorough and comprehensive courses, characterized by advanced methods of instruction and study; and are in fact largely chosen by Graduate Students, and found suitable to their needs. To some of these courses, undergraduates are admitted only by special leave of the instructor. To the courses of the Third Group, undergraduates are admitted only on the recommendation of the instructor.

Among the higher courses of instruction — of the Second and Third Groups — in nearly every department of study, are Courses of research and Seminaries, for students who wish to do special work of an advanced character. These courses are carried on under various plans of administration in the several departments, but always with the object of affording opportunity for regular independent study.

A complete year's work for a Graduate Student regularly consists of four full courses of instruction, of advanced grade, or of their equivalent in courses

and half-courses, pursued throughout an academic year. If the work is to be counted toward a degree it must be completed with distinction. All the work required in such courses must be done, and all the examinations must be passed, unless the student has leave from the Academic Board, with the approval of the Instructor, to omit some part of the ordinary requirement.

Every Graduate Student is required to file a list of her studies for the year (or at least for the first half-year), at the time she registers, with the Secretary,— or within two days thereafter, at the office. In the preparation of this list she is advised to consult with the instructors or with the chairman of the Division or Department concerned. If a change in the list is subsequently made, written notice must be filed at the office.

A student who wishes to devote her time, largely or wholly, to special study of an advanced character may count a course embracing such study as equivalent to more than one course, up to a complete year's work, or may carry on such study outside and in place of the regular courses, under the direction and supervision of some specified instructor or instructors. In either case, the substitution proposed must have the approval or consent in writing of the Instructor or Instructors concerned; and the permission of the Academic Board is required.

## DEGREES.

The requirements for the degrees of Bachelor of Arts and Master of Arts are as follows:

In order to be recommended for the degree of Bachelor of Arts, a candidate must have passed in studies amounting to sixteen courses, together with such work in English as may be prescribed for her; making a total of seventeen or seventeen and a half courses, as the case may be. She must, moreover, have attained a grade above D in at least two-thirds of all the work done by her in Radcliffe College in satisfaction of the requirements for the degree, and in her Senior year must have passed in not less than four courses, with grades above D in at least two of them.

An undergraduate must take, in each academic year, at least four courses, in addition to such work in English as may be prescribed for her; and (including her prescribed English) she may take five, but not more, as regular courses to be counted towards the degree. Certain studies taken in the Harvard Summer School may also be counted towards the degree.

The ordinary requirement for the degree of Master of Arts for a grad-

uate of a college of good standing consists of at least one year of residence and study devoted to advanced work approved by the Academic Board of Radcliffe College as affording suitable preparation for the degree and completed with high credit. Other persons will be admitted to the degree on conditions to be determined in each case.

The programme of study for the degree of Master of Arts must form a consistent plan of work pursued with some definite aim, though it need not lie wholly in one Department or field. This work may be done either in, or in connection with, the regular courses of instruction, or independently of them. In the latter case it must be carried on under the guidance of some specified instructor. Programmes should be submitted early in the academic year, and no programme will be approved that is received after January 15 of the academic year in which the degree is to be taken.

No student may count for the degree of Master of Arts courses which she has taken as an undergraduate.

All diplomas are countersigned by the President of Harvard University and bear the University seal.

## TUITION FEES.

The annual tuition fee for a student doing full work is two hundred dollars, in addition to the special laboratory fees named below. It is payable, one hundred and twenty-five dollars on October 1, seventy-five dollars on February 1.

For those students who are permitted by the Academic Board to take less than four courses, two-thirds of the fee is payable on October 1, the remaining third on February 1. The charges are as follows:—

For any regular course, not a laboratory course or course of research, sixty dollars; for any half-course, not a laboratory course, thirty dollars; for a course of research or for a laboratory course, besides the special laboratory fees, a sum equal to the fee for one, two, or more courses, according to the number of courses to which the Academic Board shall consider it equivalent as part of the student's work for the year. But the minimum fee charged for any student is forty dollars, and the maximum fee, in addition to the special laboratory fees, is two hundred dollars, covering any number of courses that a student is permitted to take.

Students in laboratory courses pay in addition a special laboratory fee of five dollars for each course and of five dollars or two and a half dollars for each half-course.

No student will be admitted for any shorter time than a whole academic year, except by special vote of the Academic Board.

A student doing full work and therefore liable for the full tuition fee of two hundred dollars is entitled to a partial remission of fee in case of properly notified withdrawal from college or protracted absence, as follows: If she withdraws in the course of the academic year she is charged only to the end of the third in which she withdraws, provided that before that time she gives written notice of her withdrawal to the Dean; otherwise she is charged to the end of the third in which such written notice is given.

If she is absent with the consent of the Academic Board for three consecutive months she is entitled to a deduction of fifty dollars from the year's tuition fee; if she is absent for the whole year, not including the midyear and final examinations or either of them, she is entitled to a deduction of one hundred and fifty dollars provided she has given in either case previous notice of her intended absence to the Secretary.

In the case of students liable for less than the full fee of two hundred dollars no deduction is made for absence or withdrawal.

No student is entitled to a reduction of fee on account of withdrawal from a course or courses after the year has begun unless she withdraws from the college and then only if she has been doing full work.

No claim for deduction of fee will be considered if presented after the close of the Academic year in which the absence or withdrawal took place.

Elizabeth Cary Agassiz House, opened in 1905, contains, in addition to the theatre, a lunch room, living room, reading room, locker room and quiet rooms for the daily use of all the Radcliffe students. In 1905–06 a large part of the running expenses of Agassiz House was defrayed by voluntary contributions. Each student registered in Radcliffe College in 1908–09 is required to pay \$5 for the use of Agassiz House. This amount will be charged on the first term bill. This requirement will hold good for each student registered during the Academic year 1909–10.

No student is permitted to attend any college exercise after October 15th in any year unless all bills previously rendered for that year have been paid; and similarly no student is permitted to attend any College exercise after March 1st unless all bills previously rendered have been paid; and in no event is any degree conferred unless all dues to the College have been paid at least twenty-four hours before Commencement Day.

# THE CHARLES ELIOT NORTON FELLOWSHIP IN GREEK STUDIES.

In 1902, James Loeb, of the Class of 1888, gave securities valued at four-teen thousand one hundred dollars for the permanent establishment of this fellowship, which he had maintained during the year 1901-02, "in grateful recognition of the long and great friendship which Professor Norton has shown him since his boyhood, and in order to record in a fitting manner the eminent services which Professor Norton has rendered the cause of Archeology, and his beneficent prominence in the Archæological Institute of America and the American School of Classical Studies at Athens."

In 1908 Mr. Loeb gave additional securities valued at five thousand dollars. The annual income is now eight hundred dollars.

Competition for the fellowship is open to members of the Senior Class in Harvard College and of the Graduate School of Arts and Sciences of Harvard University, and to Seniors and Graduate Students in Radcliffe College.

The award will be made by a committee appointed by the Department of the Classics, on the basis (1) of a thesis on a subject approved by this committee, and (2) of such other evidence of scholarship as may be accessible. In the award, no account is to be taken of the financial means of the competitor; and no award will be made in case the theses offered are not of sufficient merit.

The editors of the Harvard Studies in Classical Philology are to have the right to publish the thesis of the successful candidate.

The incumbent of the fellowship must agree to pursue her studies for the year of her incumbency at the American School of Classical Studies at Athens, and to devote herself to the study of some special subject approved by the committee, in the field of Greek History, Literature, Art, Archæology, Epigraphy, or Topography. She shall also agree to write and publish, at the end of the year of her fellowship, a monograph embodying the results of her investigations.

In accordance with the terms of the fellowship, the award will be made in the Spring of 1909, for the academic year 1909–10. The following subjects for theses are proposed by the Committee:—

- (1) The Ethics of Pindar.
- (2) The Geography of Thucydides.
- (3) The Influence of Democracy on the Character of Attic Oratory.
- (4) Plato's and Aristotle's Conception of the Art of Music in its Relation to Education and Life.

- (5) Funeral Rites in Greek Poetry and Art of the Fifth Century: with a Study of their Inner Significance.
- (6) The Evidence of the Intention of Pericles to Substitute Athena for Apollo as the National Divinity.
- (7) The Contributions of Greek Epigraphy to Geographical Knowledge.
- (8) Proverbial Philosophy in Plato,

Candidates may, however, with the consent of the Committee, write on other classical subjects.

Applications for admission to candidacy must be made to the Chairman of the Department of the Classics not later than December 1, 1908; and the theses of approved candidates must be presented to the Chairman not later than March 1, 1909.

## ELIZABETH ALLEN PATON MEMORIAL FELLOWSHIP.

A Fellowship of \$100, established for the year 1905–06, has been continued for the year 1908–09 by Lucy Allen Paton, (A. B. 1892, Ph. D. 1902) in memory of her mother, Elizabeth Allen Paton. The conditions are as follows: It is to be awarded to a graduate student who has already begun some piece of advanced research in the departments of English or Modern Languages which she wishes to complete at Radcliffe, the fellowship to be awarded entirely without regard to her financial circumstances, and only as a recognition of her character and scholarship.

This Fellowship was awarded in 1905-06 to Muriel Bothwell Carr, (McGill University) A. B. 1898, A. M. 1900, (Radeliffe) A. M. 1902.

It was awarded in 1906-07 to Gertrude Schoepperle, (Wellesley) A. B., 1903, A. M. 1905.

# SCHOLARSHIPS.

Applications for scholarships should be addressed to the Dean of Radcliffe College, and should be in the hands of the Dean on or before the first of June, 1909.

#### THE EDWARD AUSTIN SCHOLARSHIPS.

In 1899, the sum of \$25,500 was received by Radcliffe College in settlement of the bequest of \$30,000, made by Edward Austin, the income

thereof to be paid to "needy, meritorious students and teachers, to assist them in payment of their studies."

In 1900 the heirs of Edward Austin gave \$2,250 to be added to this fund. For the year 1908-09 five scholarships from the income of this fund of the value of \$200 each were awarded to Ada Swasey Blake, of the class of 1909; to Lorna Rosina Fenwick Birtwell, Emilie Christine Burford and Edith Richmond, of the class of 1911; and to Harriet Webster Marr, a Special Student.

## THE HARVARD ANNEX SCHOLARSHIP.

By gift of the Alumnae and students of the "Harvard Annex" and their friends, an annual scholarship has been established to be known as "The Harvard Annex Scholarship founded by Alumnae of Radcliffe College." The fund provides for the tuition fees of one student.

In 1908-09 this scholarship was awarded to Anna Monson Scorgie (Radcliffe College) A. B. 1903, A. M. 1904.

## THE ELLEN M. BARR SCHOLARSHIPS.

By the terms of the will of the late Ellen M. Barr, the residue of her estate, after the payment of debts and legacies, was bequeathed to Radcliffe College. Subject to the payment of an annuity, the income of this bequest is to be applied "in the form of annual scholarships of not less than two hundred and fifty dollars and not more than three hundred dollars each, for the benefit of students in Radcliffe College, who, in point of character, ability and physical constitution, give promise of future usefulness, and who stand in need of pecuniary assistance."

In 1908-09 five scholarships from this fund, of the value of \$250 each were awarded to Dorothea Clapp and Blanche Evelyn Spring, of the class of 1909; and to Alice Louise Hart, Helen Crocker Kitts, and Ethel Dewhirst Woodcock, of the class of 1910.

## THE ELLA LOWELL LYMAN MEMORIAL SCHOLARSHIP.

By gift of Mr. Arthur T. Lyman of Boston, an annual scholarship has been established in memory of his wife, Ella Lowell Lyman. The fund provides for the tuition fees of one student.

In 1908-09 this scholarship was awarded to Margaret Munro Grimshaw, of the class of 1911.

## THE ELIZABETH CARY AGASSIZ SCHOLARSHIP.

The Elizabeth Cary Agassiz Scholarship is a gift to Radcliffe College from various friends of Mrs. Agassiz, who wished that it should bear her name. The fund provides for the tuition fees of one student.

In 1909-09 the income from this scholarship was divided between June Adkinson and Marguerite Verbeck Woodman both of the class of 1909.

## THE AGNES IRWIN SCHOLARSHIP.

By gift of six hundred and eighty former pupils of the first Dean of Radcliffe College, the Agnes Irwin Scholarship has been established. By the terms of the gift the student to have the benefit of this scholarship is to be appointed by Miss Agnes Irwin, and all details regarding it are to be arranged by her for the present and the future. The fund provides for the tuition fees of one student.

In 1908-09 this scholarship was awarded to Frances Ullainee Masterson, of the class of 1910.

## THE WIDOW JOANNA HOAR SCHOLARSHIP.

The College has established the Widow Joanna Hoar Scholarship with funds contributed by an unknown friend in memory of the widow of Charles Hoar, Sheriff of Gloucester in England, who came to America with her children in 1638. In awarding this scholarship preference is to be given to natives of Concord, Mass., or to daughters of citizens of that place. The fund at present provides for the tuition fees of one student.

In 1908-09 this scholarship was awarded to Maud Lavon Worcester, of the class of 1912.

#### THE MARIA DENNY FAY MEMORIAL SCHOLARSHIP.

An annual scholarship of two hundred dollars (\$200) has been established which provides for the tuition fees of one student.

In 1908-09 this scholarship was awarded to Elizabeth Chase, of the class of 1910.

## THE JOSIAH M. FISKE MEMORIAL SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske, of New York, an annual scholarship has been established in memory of her late husband, Josiah M. Fiske, who was once a resident of Cambridge. The fund provides for the tuition fees of one student.

In 1908-09 this scholarship was awarded to Emma Frost, of the class of 1909.

### THE CANTABRIGIA SCHOLARSHIP.

The Cantabrigia Scholarship was founded in 1903 from a gift made by the Cantabrigia Club of Cambridge. The income provides for the tuition fees of one student, and will be awarded by preference to a resident of Cambridge.

In 1908-09 this scholarship was awarded to Alice Louise Carlson, of the class of 1912.

## THE ABBY W. MAY SCHOLARSHIP.

By the terms of the will of the late Sarah Wyman Whitman, of Boston, an annual scholarship of two hundred dollars (\$200) has been established in memory of Abby W. May. The fund provides for the tuition fees of one student.

In 1908-09 this scholarship was awarded to Ethel Maud Smith, of the class of 1911.

## THE MARY ELIOT PARKMAN SCHOLARSHIP.

By the terms of the will of the late Sarah Wyman Whitman, of Boston, an annual scholarship of two hundred dollars (\$200) has been established in memory of Mary Eliot Parkman. This fund provides for the tuition fees of one student.

In 1908-09 this scholarship was awarded to Victoria Ogden Howarth, of the class of 1911.

## THE JAMES A. WOOLSON SCHOLARSHIP.

By the terms of the will of the late James A. Woolson, of Cambridge, an annual scholarship of two hundred dollars (\$200) has been established which provides for the tuition fees of one student.

In 1908-09 this scholarship was awarded to Ruth Adelaide Finberg, of the class of 1910.

## THE CAROLINE A. KENNARD SCHOLARSHIP.

By gift of Mrs. Martha T. Fiske Collord, of New York, an annual scholarship was established in December 1907, in memory of her sister, Mrs. Caroline A. Kennard. This scholarship is to be given ordinarily to a student wishing to pursue studies in science. The fund provides for the tuition fees of one student.

In 1908-09 this scholarship was awarded to Catherine de Mille Lewis, of the class of 1910.

# THE SARAH SHERBURNE LANGDON HAVEN MEMORIAL SCHOLARSHIPS.

In 1908, by the will of John Haven of Rye, N. Y., \$10,000 was bequeathed to Radcliffe College. In accordance with the wishes of the testator the College has established two scholarships named in memory of his mother, Sarah Sherburne Langdon Haven.

One of these scholarships is to be awarded in 1909-10.

#### LOAN FUNDS.

In 1908 the sum of \$1000 was given to Radcliffe College for the purpose of establishing a fund to be known as the Mary Lowell Stone Loan Fund, and to be lent to deserving students. Grants from this fund must carry the obligation of ultimate repayment without interest. At least one-tenth of the fund must always be kept in the Treasury.

The Massachusetts Society for the University Education of Women has at its disposal a small loan fund, and also a limited amount of money devoted to scholarship purposes for regular students of the upper classes. Inquiries concerning both of these may be made of the Dean of Radcliffe College.

In 1907 the Alumnae of Miss Brown's School in Boston gave \$766.32 for the benefit of a Students' Loan Fund at Radcliffe College. A committee of the Radcliffe Alumnae Association has received additions to the original sum, and offers the fund in loans of varying amounts to students of approved standing and character who need financial help to continue their college course. For information concerning this fund application should be made to Miss Alice G. Arnold, 10 Frisbie Place, Cambridge.

## PRIZES.

## THE SARGENT PRIZE.

This prize was first offered in 1886–87 by John Osborne Sargent of New York, of the class of 1830, and was endowed in his memory, in 1892, by his daughter, Georgiana W. Sargent. The prize is of one hundred dollars, and is offered for the best metrical translation of a lyric poem of Horace, to be selected each year by the Department of the Classics.

The selection for 1910 is the sixteenth Epode.

Undergraduates of Harvard College and of Radcliffe College may compete for this prize. The prize may be withheld if no competitor appears to deserve it.

The versions must be neatly and legibly written or typewritten, upon letter paper of good quality, of the quarto size, with a margin of not less than one inch at the top, at the bottom, and on each side, so that it may be bound up, if desired, without injury to the writing. The sheets must be securely stitched or riveted together in such a manner that the manuscript can be easily opened and read. The title-page of each manuscript must bear an assumed name, with a statement of the writer's academic standing; and the writer must give in, with her manuscript, a sealed letter, containing her true name and superscribed with her assumed name.

The manuscript must be deposited with the Dean of Radcliffe College on or before the first day of May, 1910.

In 1890 the Sargent Prize was awarded to Helen Leah Reed, of the class of 1890.

In 1892 the Sargent Prize was awarded to Margaret Foster Herrick, a special student.

In 1901 the Sargent Prize was awarded to Norma Rose Waterbury, of the class of 1904.

#### THE GEORGE B. SOHIER PRIZE.

This prize was founded by the late Waldo Higginson of Boston, of the Class of 1833 in Harvard College, in memory of his brother-in-law George Brimmer Sohier of the Class of 1852. The endowment is for "one prize of \$250 for the best thesis presented by a successful candidate for Honors in English or in Modern Literature. If no thesis is deemed worthy of a prize, no prize will be given." "The competitors may be either: — (1) undergraduates in Harvard College, (2) Harvard graduates who are resident at the University as students in the Graduate School, or (3) students in Radcliffe College."

In 1897 the Sohier Prize was awarded to Beulah Marie Dix, of the class of 1897. Subject: "Published Collections of English and Scottish Ballads, 1765–1802."

In 1904 the Sohier Prize was awarded to Frances Elizabeth Newell, of the class of 1904. Subject: "Geoffrey of Monmouth and the Sabrina Legend."

#### THE CAROLINE I. WILBY PRIZE.

This prize was founded in 1897 in memory of Miss Caroline I. Wilby, by her friends and former pupils.

The fund, originally \$3,060, has been somewhat increased, and the income is to be given annually to a Radcliffe student as a prize "for the best original work in any department."

The Wilby Prize was given for the first time in 1899 to KATE O. PETER-SEN, (Vassar) A. B. 1890, (Radcliffe) A. M. 1895, Radcliffe graduate student, 1895–97, for a thesis on the Sources of Chaucer's Nonne Prestes Tale, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1900 to Lucy Allen Paton, A., B., 1892 A. M. 1894, Ph. D. 1902, for a thesis on Morgain la Fée, published in the series of Radcliffe College Monographs.

The Wilby Prize was given in 1904 to Belva Mary Herron (University of Michigan) B. L., 1899, Radcliffe graduate student 1903-04, for a paper on the Progress of Labor Organization among Women, and to Caroline Strong, A. B., 1903, A. M. 1906, for a thesis on the Tail-Rhyme Strophe in English Poetry.

The Wilby Prize was given in 1905 to Eleanor Harris Rowland, A. B.

1903, A. M. 1904, Ph. D. 1905, for her Doctor's dissertation on the Aesthetics of the Repetition of Visual Space Forms.

The Wilby Prize was given in 1906 to Frances Hall Rousmaniere, (Wellesley) A. B. 1900, A. M. 1904, (Radcliffe) Ph. D. 1906, for a paper on Certainty and Attention.

The Wilby Prize was given in 1907 to Mabel Ellery Adams, Radcliffe special student 1896–1904, 1905–07 for a thesis entitled, An Inquiry into the Condition of one hundred deaf persons who have been pupils at the Horace Mann School in Boston.

The prize may be withheld if no thesis or original work is deemed worthy of it.

## SUSAN ANTHONY POTTER PRIZE.

This prize is offered for the year 1908–09 by Professor M. A. Potter, in memory of his mother, Susan Anthony Potter. The prize is of one hundred dollars, and is to be given for the best thesis by a student in Harvard University or Radcliffe College, graduate or undergraduate, on any subject in the field of Comparative Literature approved by the Chairman of the Department of Comparative Literature.

Candidates should submit their subjects to Professor W. H. Schofield early in the autumn of 1908. May 1, 1909, will be the last day for receiving theses in competition.

#### PLACES OF EXAMINATIONS.

In September examinations will be held in Cambridge only.

In recent years examinations have been held in June at the following places:—

#### CALIFORNIA.

Belmont, in the rooms of Belmont School.

Los Angeles, in the rooms of the Harvard School.

## COLORADO.

Colorado Springs, in the rooms of Colorado College.

#### CONNECTICUT.

Bridgeport, in the rooms of the University School. Washington, in the rooms of the Gunnery School.

## DISTRICT OF COLUMBIA.

Washington, in the rooms of the Central High School.

#### GEORGIA.

Atlanta, in the rooms of the Boy's High School.

#### Illinois.

Chicago, in the rooms of the Law School of Northwestern University, southeast corner of Dearborn and Lake Streets.

#### INDIANA.

Indianapolis, in the rooms of the Shortridge High School.

#### IOWA.

Des Moines, in the rooms of the West High School.

#### KENTUCKY.

Louisville, in the rooms of the Boys' High School, First Street.

#### MAINE.

Gardiner, in the rooms of the Gardiner High School. Portland, in the rooms of the Portland High School.

#### MARYLAND.

Baltimore, in the rooms of Baltimore City College.

## MASSACHUSETTS.

Andover, in the rooms of Phillips Academy.
Brookline, in the rooms of the High School.
Cambridge, at 10 Garden Street.
Concord, in the rooms of the High School.
Fall River, in the rooms of the B. M. C. Durfee High School.
Fitchburg, in the rooms of the Fitchburg High School.
Lowell, in the rooms of the Lowell High School.
Lynn, in the rooms of the Classical High School.
Milton, in the rooms of Milton Academy.
Quincy, in the rooms of the Quincy High School.
Springfield, in the rooms of the Springfield High School.
Worcester, in the rooms of Worcester Academy.

#### MICHIGAN.

Detroit, in the rooms of the University School.

#### MINNESOTA.

St. Paul, in the rooms of St. Paul Academy, corner Portland Avenue and Dale Street.

#### MISSOURI.

Kansas City, in the rooms of the Central High School. St. Louis, in the rooms of the Board of Education, 9th and Locust Streets.

#### NEW HAMPSHIRE.

Exeter, in the rooms of Phillips Exeter Academy.

Manchester, in the rooms of the Manchester High School.

NEW JERSEY.

Newark, in the rooms of the High School.

NEW YORK.

Buffalo, in the rooms of the Central High School, corner of Court and Franklin Streets.

New York, in the rooms of The Sachs School for Girls, 116 West 59th Street.

Utica, in the rooms of the Utica Free Academy.

Оню.

Cincinnati, in the rooms of the Young Men's Christian Association. Cleveland, in the rooms of Adelbert College.

Youngstown, in the rooms of Rayen School.

OREGON.

Portland, in the lecture-room of the Portland Library.

PENNSYLVANIA.

Philadelphia, in the rooms of the Central High School. Pittsburg, in the room of Shady Side Academy.

RHODE ISLAND.

Providence, in the rooms of the Hope Street High School.

TEXAS.

Dallas, in the rooms of the Oak Grove School.

WASHINGTON.

Seattle, in the rooms of the Central School, No. 15. Spokane, in the rooms of the High School.

WISCONSIN.

Milwaukee, in the rooms of the East Division High School.

HAWAII.

Honolulu, in the rooms of Oahu College.

ENGLAND.

London, in the rooms of the University of London.

GERMANY.

Bonn, at the Hotel Royal.

SWITZERLAND.

Geneva, at the Hotel Beau-Rivage.

#### 1909.

## RADCLIFFE COLLEGE.

## ORDER OF EXAMINATIONS. (June and September.)

Monday, June 28 and September 20.

8.00-9.00.	All candidates meet at 10 Garden Street the officer in charge	
of the examinations.		

9.00-10.00.	Elementary Physics.	2.00-4.30.	Geometry.
10.15-11.15.	Chemistry.	2.00-4.00.	Plane Geometry.
11.30- 1.00.	Elementary Algebra.	4.30 - 6.00.	Solid Geometry.

## Tuesday, June 29 and September 21.

8.30-10.30.	Elementary English.	2.00-4.00.	Elementary Latin.
8.30-11.30.	English A.	4.15-6.15.	Advanced Latin.
11.45- 1.15.	Logarithms and Trigon	ometry.	

# Wednesday, June 30 and September 22.

8.00- 9.30.	Elementary History.	2.15 - 4.15.	Elementary Greek.
9.45-11.15.	Elementary French.	4.30 - 6.30.	Advanced Greek.
11.30- 1.30.	Advanced French.	5.00-6.00.	Astronomy.

## Thursday, July 1 and September 23.

8.00- 9.30.	Elementary German.	2.10-4.10.	Advanced History.
9.45-11.45.	Advanced German.	4.20 - 5.20.	Civil Government.
12.00- 1.30.	Advanced Algebra.	5.30-6.30.	Economics.

## Friday, July 2 and September 24

9.00-10.30.	Harmony.	3.10-4.10.	Anatomy.
11.00- 1.00.	Counterpoint.	4.20-5.20.	Zoölogy.
2.00- 3.00.	Botany.	5.30-6.30.	Geography.

## Saturday, July 3 and September 25.

8.00-11.00. Freehand Drawing.\* 11.15-1.15. Projection Drawing.\*

#### LABORATORY EXAMINATIONS.

In June, classes from schools near Cambridge take the laboratory examinations in Physics and Chemistry on earlier days.

## SEPTEMBER EXAMINATIONS.

The September Examinations will be held in Cambridge only, on Monday, Tuesday, Wednesday, Thursday, Friday and Saturday, September 20, 21, 22, 23, 24, and 25.

<sup>\*</sup> Examinations in Freehand Drawing and Projections are held in Cambridge only.

## COLLEGE ENTRANCE EXAMINATION BOARD.

In June, 1909, papers of the College Entrance Examination Board may be substituted for corresponding papers set for the separate admission examinations held by Harvard University, but no candidate may offer both Harvard and Board examinations in the same subjects. For more particular information apply to the Secretary of Radcliffe College.

The examinations of the Board will be held June 14–19, 1909. Applications to attend the Board's examinations must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, N. Y., and must be made upon a blank form to be

obtained from the Secretary of the Board upon application.

Applications for examination at points in the United States east of the Mississippi River must be received by the Board at least two weeks in advance of the examinations, that is, on or before Monday, May 31, 1909; applications for examination elsewhere in the United States or in Canada must be received at least three weeks in advance of the examinations, that is, on or before Monday, May 24, 1909; and applications for examination at points outside the United States and Canada must be received at least five weeks in advance of the examinations, that is, on or before Monday, May 10, 1909.

Applications received later than the dates named will be accepted when it is possible to arrange for the examinations of the candidates concerned, but only upon the payment of \$5.00 in addition to the usual examination fee.

The examination fee is \$5.00 for all candidates examined at points in the United States and Canada, and \$15.00 for all candidates examined at points outside of the United States and Canada. The fee (which cannot be accepted in advance of the application) should be remitted by postal order, express order, or draft on New York, to the order of the College Entrance Examination Board.

A list of the places at which examinations are to be held by the Board will be published about March 1. Requests that the examinations be held at particular points, to receive proper consideration, should be addressed to the Secretary of the Board not later than February 1.

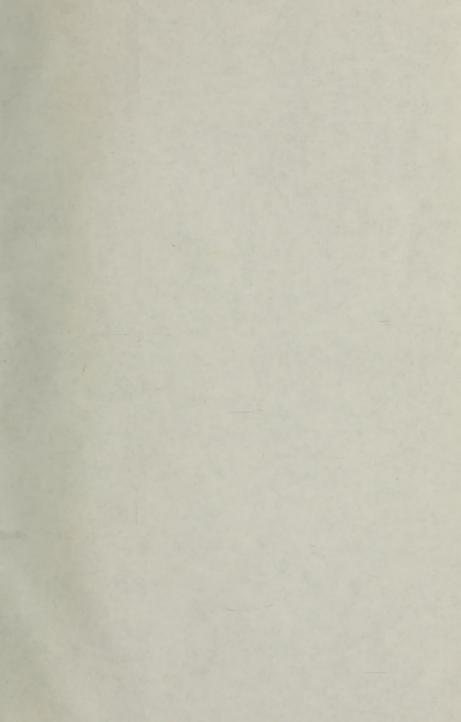


Monographs prepared by the students are published and sold by Messrs. Ginn & Company.

Besides the present publication, Radcliffe College issues annually a list of its Courses of Study and an Annual Report. These documents, and also separate pamphlets, published by Harvard University giving detailed accounts of the work of the principal departments, may be had by addressing

Radcliffe College,

Cambridge, Massachusetts.



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